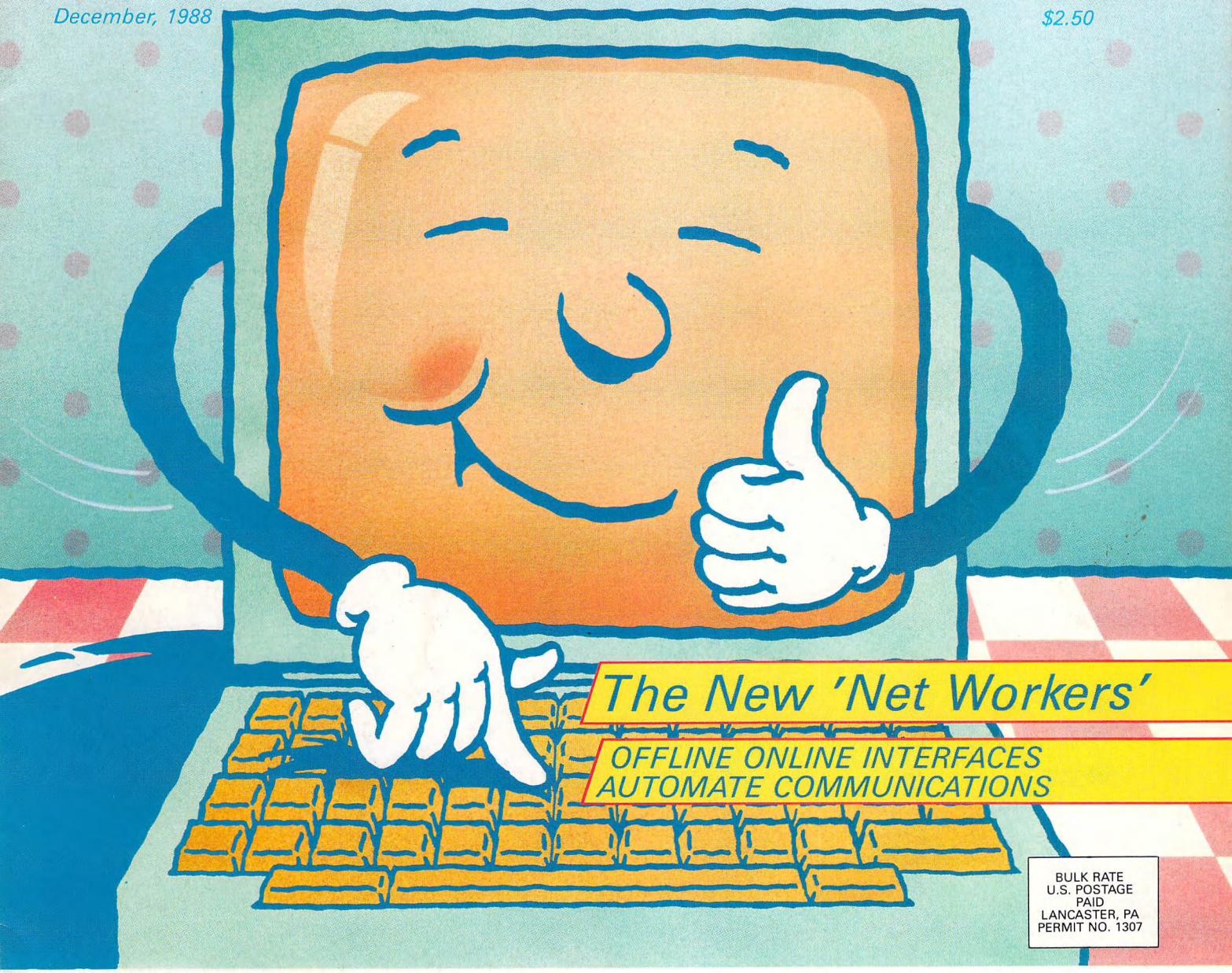
A COMPUSERVE PUBLICATION PRINTED MONTHLY/ONLINE DAILY

ONLINE TODAY

December, 1988 $2.50



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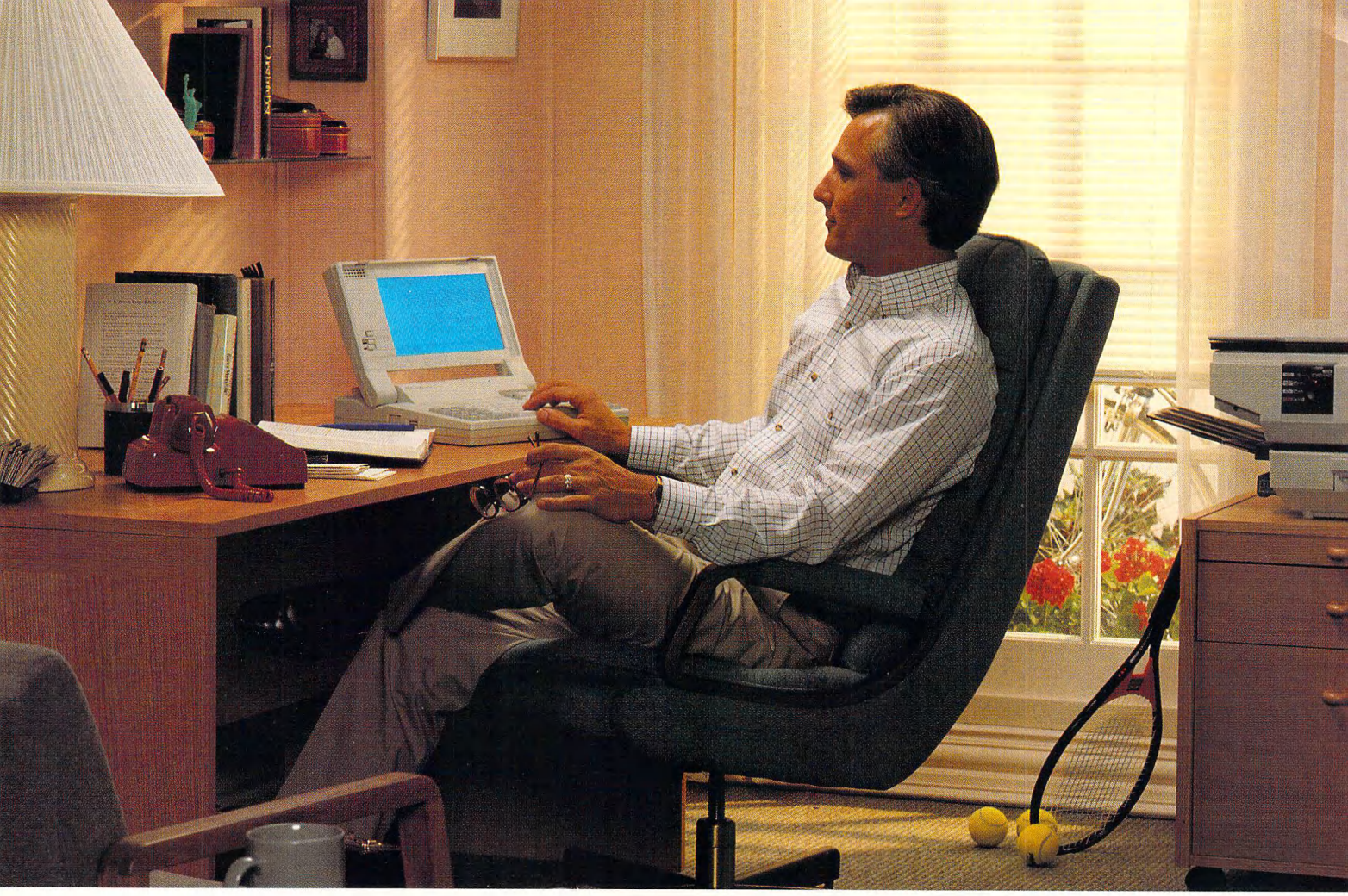

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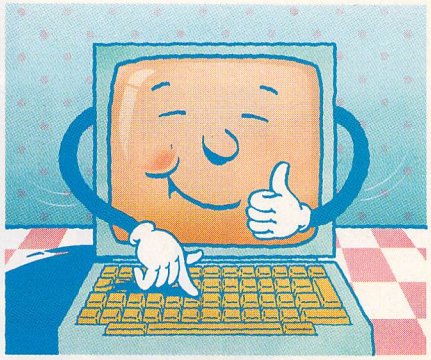
Online Today (ISSN 0891-4672) is published monthly in the United States of America by CompuServe Incorporated, 5000 Arlington Centre Blvd., Columbus, OH 43220. POSTMASTER: Send address changes to *Online Today* Reader Administration, P.O. Box 20212, Columbus, OH 43220-0212.



COVER STORY

Ingenious interfaces speed online access, save connect-time dollars. Find out how to harness the power of the New 'Net Workers'—**page 16.**

TRAVEL

Winter wonders abound in Colorado's Snow Country, famous for breathtaking views and top-flight skiing—**page 32.**

Too Hot to Print

Catch computer industry news as it happens, keep up with online events, read special reports, commentary and more product reviews. You'll find it only in *Online Today Daily Edition*, a daily-updated newspaper full of information that's too hot to print. GO OLT.

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DEAR READER

When most of us log onto an online information service, we don't think much about the mechanics of how our microcomputer communicates with the remote computer. Yet the host-micro communication link—or interface as it's commonly called—is where we've seen some of the most dramatic improvement in the last five years and where we'll see some of the most exciting changes in the next five.

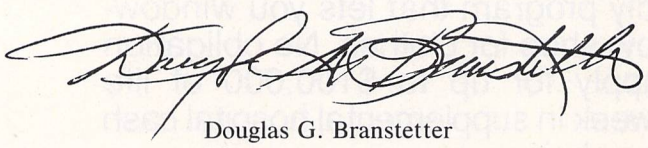
Not long ago, host-micro communication on CompuServe was limited to straight sending and receiving of ASCII data organized on-screen by interlocking menus. As PCs became more powerful, micro-based command files (or script files) were created by resourceful users to manipulate the system and data more efficiently. Later, CompuServe developed more sophisticated interfaces such as the Professional Connection software package that built upon script file concept—auto log-on, customizing menus, capturing data, etc.—in addition to introducing high-resolution graphics for the first time. More recently, interfaces that take full advantage of local intelligence (such as CompuServe Navigator and TAPCIS) have been developed, and more are in the offing.

Today—barely 10 years after online services became available to small system users—we stand on the threshold of yet another era in micro-mainframe communication. It's an era that will see unprecedented leaps forward in processing speed, ease of use and graphics-sound capabilities. And on CompuServe, this new era will arrive in 1989.

In this issue's cover feature (page 16), veteran CompuServe user and *How to Get the Most Out of CompuServe* co-author Charles Bowen takes a look at interfaces—past, present and future. In addition, you will get practical advice on how to take advantage of the many new programs available, and how to create your own script files.

* * *

While we're on the subject of interfaces, financial services users might want to check out this month's Business/Investing section on page 10, "Explore Financial Interfaces." Find out how to marry your spreadsheets and specialized financial analysis programs to online information resources such as Quick Quote.



Douglas G. Branstetter
Editor

ONLINE TODAY

***Online Today*®, December 1988**
Volume 7 Number 12

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LETTERS

Language Lessons

I was pleased to see the article about Esperanto (September issue, p. 42), but disappointed that there was no mention of the Esperanto course stack for Macintosh Hypercard, which can be downloaded from the Education stack library (GO STACKWARE).

Michael Urban
Los Angeles, Calif.

1st Word Defense

As a 1st Word user, I must take issue with Franklyn Jones' review (September issue, p. 56).

The reviewer's IBM bias shows. He did not mention that 1st Word Plus runs under GEM on several computers, including the Atari ST series. And most of the review was not about 1st Word Plus, but about his dislike of GEM/3.

The review says "using a mouse means an additional hardware investment." Surely with the Apple Macintosh and IIgs, the Commodore Amiga, the Atari ST and even the IBM PS/2 series, many CompuServe subscribers use a mouse.

The reviewer also complains it is necessary to exit 1st Word to print. This simply isn't true. Printing is done by a separate application, 1st Print, but it is easy to invoke from within 1st Word Plus. This is not an "oddity"; leaving the print utility on disk is a logical way to keep about 40K more documents in memory.

Joseph Schachner
Suffern, N.Y.

Reviewer's response: 1st Word may be available under other operating environments, but I reviewed and commented on the version designed for GEM and the IBM PC.

Although 1st Word is separate from GEM, the two become so closely integrated on the IBM PC that they must be considered as one. And some CompuServe users might indeed use a mouse with their Apple IIs and Amigas, but there are also thousands of personal computer users who do not. Thus, an additional investment is often required.

Rave Review

Thank you for putting Apple and Apple IIgs product reviews in your magazine. It's nice to know my computer is included in your reviews!

David White
Orlando, Fla.

Vaccine Update

Thank you for the announcement of our anti-viral software product for the IBM family (September issue, p. 58). Our product, Vaccine, now processes .SYS, .OVL and BOOT record areas for possible viral infection as well as executable files (.EXE, .COM) as you mentioned. And please note that WorldWide Data's new toll-free number is 1-800-451-8424.

Ron Benvenisti
WorldWide Data
New York, N.Y.

Faster Access

I agree with Cary Rogers (October issue, p. 36) when he says "patience and knowing when and where to ask for help are keys to using CompuServe."

For computer hobbyists and some computer professionals, getting there may be half the fun. But as a busy manager, I don't have the time to become involved in the vast intricacies of CompuServe access. I must be able to get into any part of the database and get what I need as quickly as possible.

Ed Wright
Columbus, Ohio

Correction

In the August *Online Today* (p. 8), the phone number for Connected Education is incorrect. The number is 1-212-549-6509.

Send a Letter

OLT-30 **Letters to the Editor** *main menu. Lists all departments.*

OLT-31 **Send a letter instructions.** *Complete instructions on how to send a letter to the editor via the electronic service.*

OLT-32 **Read letters** *from other OLT readers.*

OLT-33 **Send a letter** *to the editor. You will receive prompts for each step in the process. Important Note: We cannot answer questions regarding the CompuServe Information Service through this service. If you have questions or problems, please use the Feedback service (GO FEEDBACK).*

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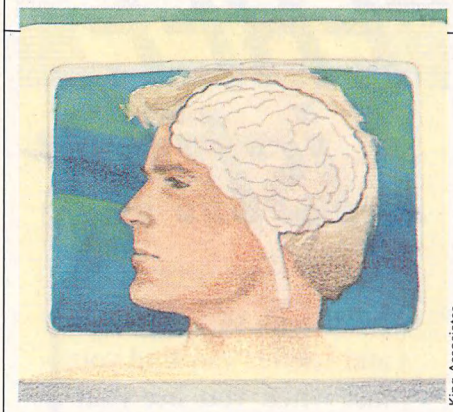


King Associates

Hand Me the Brain Simulator, Igor

It sounds like the perfect gift for the budding Dr. Frankenstein.

The Brain Simulator, which runs on IBM PC, PC-XT, PC-AT and compatible computers, emulates a small section of the human brain. The software package is published by Abbot, Foster and Hauserman Co. of San Francisco.

Charles Simon, the Brain Simulator's developer, says the program shows how an array of neurons band together in networks, giving us the ability to remember, recognize patterns and learn. The package enables users to set up to 1,200 simulated neurons and 5,000 synapses to create basic theoretical models of the brain.

Call 415/955-2711 for more details.

—John Edwards

Buckle Up for Computer Safety

Using a laptop personal computer in a car sounds like a good idea—until you try it. During sudden turns or on rough roads, keeping an expensive piece of computer equipment from flying around the passenger compartment is unnerving and dangerous.

However, with the Zirco Laptop Car Seat, users can safely drive while their valuable laptop sits securely next to them.

The Laptop Car Seat is comparable to a child's car seat, according to the Wheat Ridge, Colo.-based company. The device, which can hold a laptop computer up to 15 inches wide and 20 inches deep, is held in place with a hook and the passenger-side seat belt. Lips on the front and side of the seat, an elastic cord and strips of velcro are fastened to secure the laptop in the seat.

Zirco successfully tested the seat in a Jeep on a rough road. The company, however, does not recommend using its product this way.

Mark Zirinsky, Zirco's president, bought a laptop computer "for convenience, as I spend so much time traveling. Then I discovered there wasn't a comfortable way to use my laptop in the car. So, we invented one. Besides, it keeps my $1,800 computer from bouncing around in my car."

More information is available by calling Zirco at 303/421-2013.

Home-Office Boom Means More Business

The home-office computer market—the fastest growing segment in the industry—has grown 28 percent during the last year, according to a survey of 10,000 personal computer users conducted by Fuji Photo Film USA.

More than half of home computer users—and nearly three-fourths of those who use their computers exclusively for business—also use a computer at work. Consequently, Fuji has concluded that the growth in the home computer market is a direct result of the penetration the computer has made into the corporate world.

The home market is undergoing dramatic changes, according to Steve Solomon, general manager of Fuji's computer media division. "Corporate usage has seeded the growth of the home-office market," he says. "Having become comfortable with using a computer at work, people are willing to invest in home-computing equipment to extend their work day or to start a part- or full-time business."

The rise of entrepreneurial ventures also is contributing to this trend of home-office computing. More than one-fourth of home workers use computers to operate their own businesses. "With one out of every three new businesses operating from the home, the foundation is set for strong future growth in this market segment," says Solomon.

Vendors are realizing that education and recreation are not the primary needs of home computer users. Although the corporate and home markets are still separate segments, the type of computers people use at work does affect their computer purchases for home.

Fuji's survey discovered a relatively high incidence of IBM PC and compatible computers, long prevalent in the office, in the home market as well. IBM PC and compatibles account for 38 percent of home-office computers, compared with Commodore (31 percent) and Apple (12 percent), both of which are viewed as traditional home computers.

For information, contact Fuji Photo Film USA Inc., 555 Taxter Rd., Elmsford, NY 10523; 914/789-8145.

On CompuServe, visit the Working From Home Forum (GO WORK) for information on telecommuting or starting a home business.

—Cathryn Conroy

Apple 'Pickings' for the Disabled

A packet of information on Apple computer resources for the handicapped is available from Access Unlimited Speech Enterprises, a charitable, nonprofit, special technology corporation.

The package includes titles, descriptions and prices of talking and large-print Apple software, accessories, peripherals and special hardware, such as alternatives to the standard keyboard.

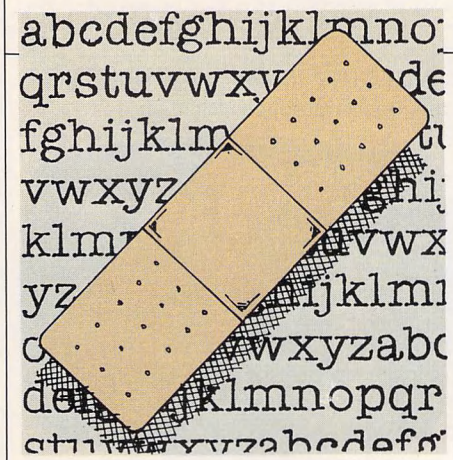
The products described in the packet are being used by the blind, low-visioned, multiple-handicapped, mute, reading- or learning-disabled, mentally retarded and hearing impaired. Some are designed for users with special needs, while others are general-market products that are recommended additions to the Apple computer system used by a handicapped child or adult.

When requesting a free information packet, include your name, organization, address and telephone number, the nature of the disability being addressed, computer of interest, and age or developmental level. Information tailored to your needs will be sent. Mention that you heard of the packet in *Online Today*. To order, call 800/531-5314 (nationwide) or 800/292-5619 (in Texas).

The organization also is selling a 10-minute VHS videotape of severely handicapped children and young adults using Apple computers to demonstrate the versatility of the machines. The tape costs $45 plus $3.50 shipping and handling. To order, call 713/461-0006.

For information, contact Access Unlimited Speech Enterprises, 9039 Katy Freeway, Suite 414, Houston, TX 77024.

Information on computers and the handicapped is available in the Disabilities Forum (GO DISABILITIES).



The Writing Edge

If you want to polish your business proposal, resume or promotional brochure, there is now a high-tech (and speedy) way to do it.

The Writing Edge Inc., an online network of professional writers and editors, offers overnight editing and review of any kind of writing. Based in Washington, D.C., The Writing Edge accepts word-processed documents via modem or electronic mail. A fully edited version is sent electronically to the client by the next day.

The service is targeted at business executives and others who need fast yet objective advice on crucial documents. Two options are offered: Editors will simply review a piece, making comments and suggesting revisions at the end of the article, or they will completely edit the text, making changes to the copy.

The service is available to anyone with access to a modem and an IBM PC or compatible or an Apple Macintosh computer. Documents can be created with most word processors and transmitted with most communications packages. Document transmission typically takes a few seconds per page at normal telephone rates.

Fees are calculated on an hourly basis and vary with the depth and nature of the work required. The Writing Edge offers a money-back guarantee if the client is not satisfied.

For information, contact The Writing Edge, P.O. Box 15585, Southeast Station, Washington, D.C. 20003; 202/483-3549.

You also can get the help of communications experts in a number of CompuServe forums, including the Public Relations and Marketing Forum (GO PRSIG) and the Journalism Forum (GO JFORUM).

—Cathryn Conroy

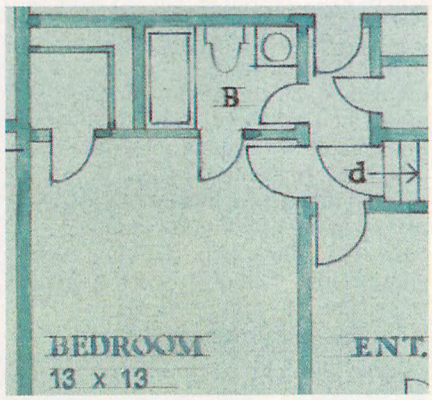
Hawaiian ATMs Go Bilingual

The Bank of Hawaii has installed the nation's first bilingual automatic teller machines. Because Hawaii is a primary travel destination for many Japanese vacationers, the bank is installing Japanese language display programs to cater to them.

Using specially encoded bank cards, the Japanese visitors can access their own accounts through the bank's computer network. According to Donna Hunt, a Bank of Hawaii executive, as older ATMs are replaced, they will be upgraded to operate with the bilingual software.

When a Japanese bank card is inserted into an ATM, the device automatically switches out of English display mode. The English and Japanese implementations of the ATM software are similar, so all users can perform such typical transactions as cash withdrawals and verifying account balances.

Additional information is available from Bank of Hawaii at 808/537-8111.



King Associates

Software Checks Home Hazards

Home-Safe-Home, a new personal computer program, helps elderly and disabled people uncover home safety hazards.

The software is an expert-based system that allows the disabled person or care providers to evaluate home safety factors, according to Idea Works Inc., Home-Safe-Home's developer.

Unsafe areas are isolated as the program receives answers to specific questions about the home's design. The software evaluates the responses and rates them against the occupant's medical status.

More information can be obtained from Idea Works at 314/445-4554.

Intimate Software

Heart-to-Heart is billed as the first intimate microcomputer software communication session for couples. The program provides a questionnaire for each partner to answer individually and then generates a guided communication session to assist the couple in improving areas where differences exist.

The questionnaire, containing more than 150 questions, is based on extensive research into the dynamics of couple relationships. The opening menu allows the users to choose from five versions designed for the unmarried, premarital, unmarried with children, married without children and married with children.

Heart-to-Heart explores 12 controversial areas in a relationship, including leisure activities, finances, male and female roles, friends and family, sex and intimacy, realistic perceptions, realistic expectations, personality differences, problem solving, communication and values.

Retailing for $45.95, the program is designed for IBM PC and compatible computers.

For complete information, contact Interactive Software, 496 LaGuardia Pl., Suite 215, New York, NY 10012; 800/541-0900 (orders only) or 718/768-1427.

Used Microcomputer Market Multiplies

If you would like to own this year's newest computer but don't know what to do with your old one, take heart. The market for used computers is expanding, and you might get a few dollars out of your relic.

A study by the Washington-based National Association of Computer Dealers indicates that used computer sales are expanding at 50 percent per year. Microcomputers account for a large share of the market, which is projected at nearly $2 billion for 1988.

Sellers of personal computers have a number of new marketing alternatives this year, including used-computer stores, brokers and online equipment databases. A used-computer trading index assures buyers and sellers of reasonable, consistent pricing.

Additional details are available from the National Association of Computer Dealers at 202/333-0102.

On CompuServe, access to used-computer indexes is available from The Boston Computer Exchange (GO BCE).

—James Moran

How to Get The Most Out of CompuServe

Terms for Terminals

by Charles Bowen and David Peyton

Some computer terms aren't native to computers at all. Instead, they are derived from the language of writers and printers, harkening back to mechanical devices such as typewriters and linotype and teletype machines. As computer users create their own meanings for these older phrases, we may one day observe the birth of anachronisms.

Consider, for instance, the *carriage return*. On a manual typewriter, the carriage is the moving unit that contains the platen and its associated parts. Its job is to carry the paper across the point at which the keys strike through the inked ribbon. The carriage return is a physical part of the machine, an arm with which the operator returns the carriage (usually, at the end of a line) so that when the next letter is typed, it will appear on the left margin.

Computerists use "carriage return" to mean a code (or its symbol) that causes the cursor to be returned to the left margin.

We can understand this phrase in both its historic and current sense because we grew up within hailing distance of the typewriter age. Having seen the slow change in the term's usage, we can make the necessary mental leap to connect the references. However, it is possible that within our lifetimes we will be asked by a youngster to point out the computer's "carriage."

This musing came about as we continued last month's exploration of default settings on CompuServe, because many of the items recorded in the Terminal/Options area of the system use some of the same terms we know from our typewriter heritage, such as "caps lock," "tabs," "form feeds" and "backspace."

To recap, we saw last month that by typing GO TERMINAL or GO OPTIONS we arrive at this menu:

```
TERMINAL SETTINGS/SERVICE OPTIONS
Use this area to change your terminal
type/parameters and/or service options.
  1 Instructions
  2 Change permanent settings
  3 Explanation of session vs. permanent
  4 Show session vs. permanent
  5 Change current session settings
Enter choice!
```

Our introduction to this material came when we discussed screen widths and depths (and compared the settings here with the use of the Set command). Now we're ready for a closer look. If you select Option 2 at this prompt, you see:

```
PERMANENT SETTINGS
  1 Explanation
  2 Log-on/Service options
  3 Display options
  4 Terminal type/parameters
  5 Transfer protocol/graphic support
  6 Make session settings permanent
Type EXIT when done
Enter choice!
```

It is from this menu that we do most of our work.

Defaults are defined as settings that tell CompuServe how to send information to you, telling it, for instance, "Dear CompuServe: I'd like 24 lines per screen, 80 characters per line, upper- and lowercase letters ...." Using this area of the system, you make your settings permanent.

Last month, we looked at the display defaults listed under Option 3. Now let's plunge into "terminal type/parameters," Option 4, which produces this menu:

```
TERMINAL TYPE/PARAMETERS
  1 TERMINAL type [OTHER]
  2 Screen WIDTH [80]
  3 LINES per page [24]
  4 Form FEEDS [SIMULATED]
  5 Horizontal TABS [SIMULATED]
  6 Chars. received (CASE) [U/L]
  7 Chars. sent in CAPS [NO]
  8 PARITY [EVEN]
  9 Output DELAYS [1]
 10 ERASE when backspacing [NO]
 11 Micro inquiry sequence at logon [NO]
Enter choice!
```

The material in square brackets on this menu illustrates the current settings on file about your computer type.

This menu offers some old ideas such as "tabs," "caps" and "backspacing"), as well as some new concepts. For instance, what is a "terminal type"?

CompuServe supports a number of specialized terminals and software, each with its own features. Selecting this option produces this list:

```
TERMINAL TYPE
  1 VIDTEX (Professional Connection)
  2 ANSI
  3 VT100
  4 VT52
  5 Heath (Zenith)
  6 ADM
  7 CRT
  8 Other
Enter choice !
```

The first option—VIDTEX compatible—is the one you select if you are using one of CompuServe's own terminal programs, such as The Professional Connection or VIDTEX. Generally, the others on the list represent different ways of dealing with control and escape codes online. For instance, ANSI-compatible systems conform to certain escape and control sequences defined by the ANSI standard; VT52 and VT100 are commercial terminals that have special control or escape sequences of their own; CRT is used for terminals or micros that respond to a form feed signal by clearing the screen, but have no other special control or escape codes in use.

For most of us, either Option 1, "VIDTEX," or the "Other" option does the trick. But if you think your system conforms to one of the other standards, check your manual or call your salesperson. If that does not help, use Feedback (GO FEEDBACK).

Many modern communications programs offer "terminal emulations" that can give you a new view of CompuServe. You might be able to instruct your software to emulate a VT100 terminal, then use this menu to select terminal type 4 and see how the system looks to users of that system.

The next default concerns *screen width*. CompuServe often displays its information in lines that are a maximum of 32 characters long. But if you are using a computer that has a different line length, you need to tell the system how to display text. Similar to the setting of a right margin on a typewriter, screen width is simply the number of characters that fit on a screen line. When you select this option, the system sends a Width prompt. Here you enter the number of characters that can be accommodated on a single line on your screen, such as 32, 40, 64 or 80.

Lines per screen means the number-

of lines that fit on one screen. Ordinarily, CompuServe sends text to you in "pages," filling the screen with words, then pausing and prompting you to press the Return key for the next page. This option tells CompuServe how many lines to a page to send for your screen. (This applies only to video; if you use a printing terminal, this option should be set to zero unless form feeds are desired.)

Form feeds can be either real or simulated. Real form feeds use your computer's control to clear the screen and move the cursor to the upper-left corner (if your communications software can accommodate this); simulated ones merely print eight blank lines between pages. (On a printing terminal, a real form feed causes the paper to advance to the top of the next page on a continuous sheet.)

Horizontal tabs also can be real or simulated. Real horizontal tabs can be transmitted if your terminal has tab stops and your communications software recognizes them. Otherwise, they are simulated by eight spaces.

The next two options deal with uppercase and lowercase text. Some computers can accept one case only.

Characters received (case) has three possible settings: U/L (normal mode) means that the text you receive from CompuServe will be in capital and lowercase letters as available on the host computer; Upper means you will receive the text from the host in capital letters only; Lower means you will receive the text in lowercase only.

Characters sent in caps can be set as No or Yes. If you set it to Yes, whatever you type on the keyboard will always be sent in capital letters, regardless of whether or not you hold down the Shift key. Set at No (the normal mode), whatever you type will be in the case you have selected. It helps to think of this one as a "caps lock" on a typewriter. When on (Yes), all letters that you type are uppercase. When the caps lock is off (No), letters are uppercase or lowercase, depending on whether you hold the Shift key. (Note that the caps lock setting does not affect the case of letters sent to your screen. This is controlled by Option 6.)

Parity refers to a setting in your terminal software, and understanding it requires a little background. Communications programs usually have a number of parameter settings for parity and data bits, all explained in your software's user manual.

Most CompuServe members log on with a setting of 7 bits/even parity, which is the default setting. If you try to log on with another popular setting (8-bits/no parity), you receive garble at the log-on prompt. However, you can come to this part of the system, choose the parity setting and, when prompted, select the option "zero." This informs CompuServe that in the future you will routinely be logging on with the 8-bit/no parity setting, rather than 7-bit/even parity.

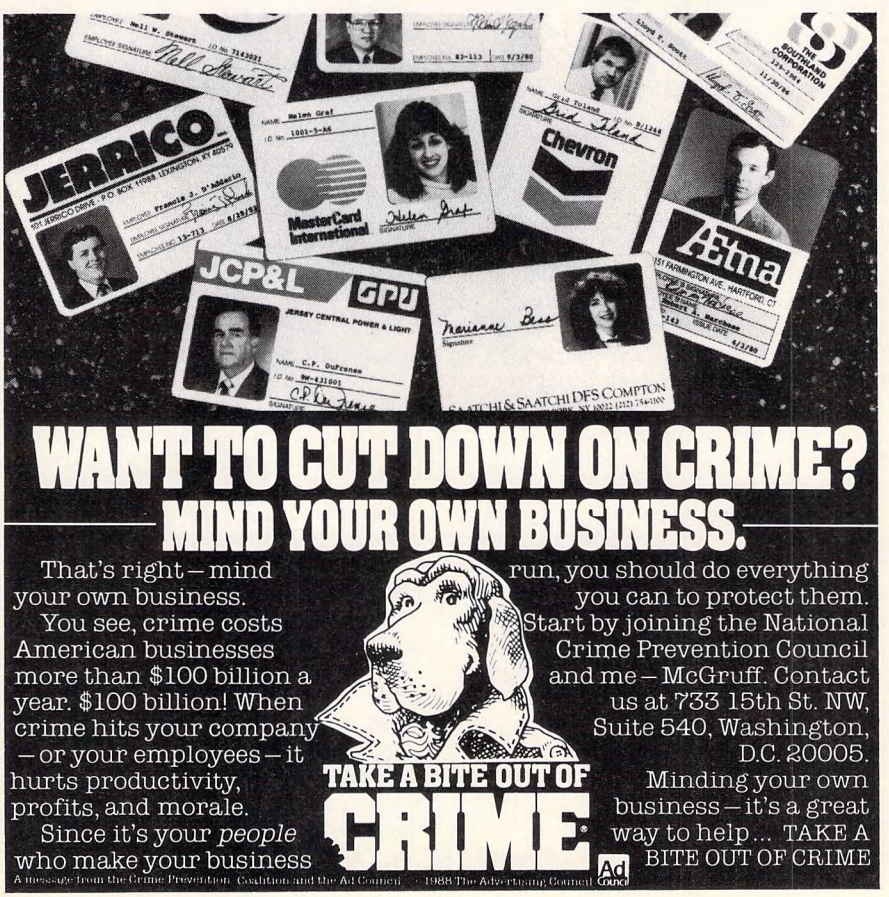
Output delays are needed when your printer operates at a slower speed than your modem, causing characters to be lost at the beginning of each line. (Delays will be recognized only if you are logging on through CompuServe's own network, not a packet network, such as TYMNET, Telenet or Datapak.)

Erase when backspacing can be set to either Yes or No. A Yes setting means that when you transmit a backspace from your keyboard, CompuServe sends a space and another backspace (in effect, erasing the last character typed). For almost all modern terminal software, this is the normal setting. However, a No setting also is available, meaning no special processing is done by the system when a backspace is received.

The last option, *Micro inquiry sequence at log-on*, is another new concept. If set to Yes, it tells the system to discreetly and silently communicate with your terminal program at log-on to determine if it recognizes "VIDTEX protocols" (such as B Protocol for uploading and downloading and certain "cursor positioning" codes for graphics). If you are using CompuServe's own communications programs—The Professional Connection or VIDTEX—this option should be set to Yes. Otherwise, set it to No.

When you exit the Terminal/Options area, the system always asks whether the changes you have made should be in effect for this session only or permanently. So, don't be afraid to experiment with the settings. You can always change them again if you don't like what you have selected.

Charles Bowen and David Peyton co-authored How to Get the Most Out of CompuServe *and* Advanced CompuServe for IBM PC Power Users. *Bowen's CompuServe User ID number is 70007,411. Peyton's is 76703,244.*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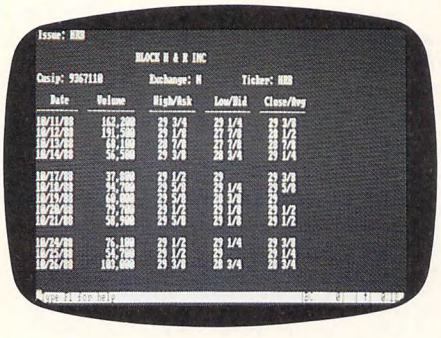
Explore Financial Interfaces

Give Your Software the Unadorned Numbers

by Mike Houdeshell

If you are wondering if there is a profitable way to marry your financial software—spreadsheets as well as more specialized financial analysis programs—with the online information resources available through CompuServe, the answer is unequivocally yes! All you need is a little help in arranging this union of convenience.



DOWNLOADING TO SPREADSHEETS

Maybe you have become comfortable viewing current and historical trading information using CompuServe's tidy "off the rack" financial services such as Quick Quote or PRICES. And you know that the most common use for raw securities data is in spreadsheet programs. But if you're a Lotus 1-2-3 or Excel user, it probably seems a little primitive to copy the numbers into your spreadsheet one by one, removing labels, lines and other helpful report features that your software package interprets as confusing clutter. After all, it just wants the unadorned numbers. With this in mind, CompuServe has provided a way for you to log on and receive current and historical pricing data from services such as Quick Quote and PRICES in a form that your financial program can digest immediately, with no intervention by you. In fact, it all happens automatically and invisibly off-screen, where the fallible human hand can't impede—and muddy—the clear flow of data.

Retrieving Current Quotes

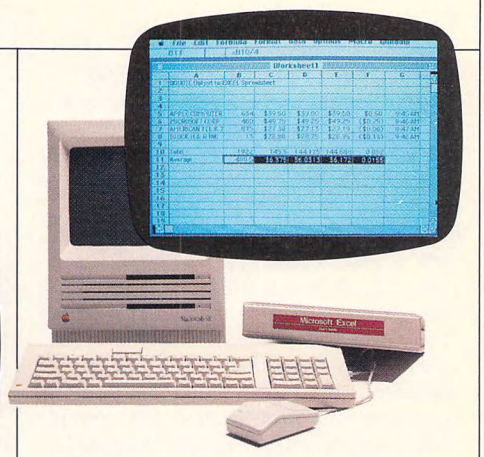
CompuServe sends current pricing information through Quick Quote (GO QQUOTE), a service that provides access to stock quotes (delayed more than 15 minutes) during the trading day.

An IBM PC-Compatible Approach

If you are an IBM PC user with Lotus 1-2-3 software, simply log on, type GO QQUOTE and type /OUTPUT when you are prompted for issue identifiers (ticker symbols). QQUOTE now knows it should prepare the data for spreadsheet use and prompts you for a filename. You should specify a file with a .PRN extension (for instance, MYFILE.PRN) if you are going to use the file in Lotus 1-2-3. QQUOTE then returns to its usual mode of operation by asking you to supply issue identifiers. When you are finished, no report appears on your screen. The numbers, ready for your spreadsheet, are in MYFILE.PRN.

To get the numbers into your spreadsheet, you must transfer the file from the online disk storage to your IBM PC. By using CompuServe's online file-transfer program, FILTRN, you ensure that the data gets to your computer in one piece. FILTRN, which supports several common dialogues for transferring files, was designed to allow you to easily send and retrieve files between CompuServe and your computer (and at the same time check for transmission errors that could occur from a noisy phone line).

Type GO FILTRN and select a protocol, such as CompuServe's B or Quick B protocols. Next, specify "download" as the transfer direction. Then, select the ASCII file type setting (file transfers from all financial area applications use the ASCII setting). Finally, CompuServe tells you when the transfer is complete. Then log off, start up 1-2-3 and import the MYFILE.PRN file.



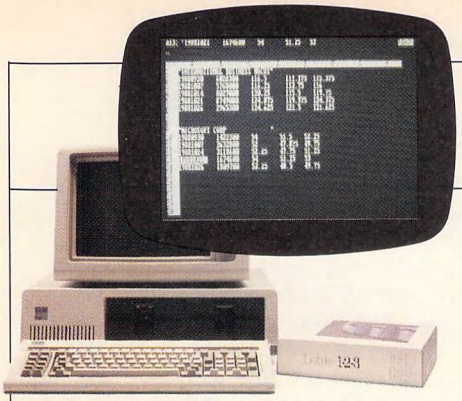
A Macintosh Approach

If you are using a popular Macintosh spreadsheet such as Excel, you can accomplish the same task with a couple of variations. As with the IBM PC, you start by using the data filename, such as MAC.DAT (the .PRN extension is not necessary). Then you are asked to supply issues. Here the Mac and the IBM PC part ways. For the numbers to be useful to your Macintosh, you should type /OPTION at the Issue prompt instead of immediately typing ticker symbols, and select Choice 9, "Tabs between items," from the menu that appears. This tells MQDATA to put tabs between prices, which Excel will use to place individual data items in separate columns. Once that is completed, you can enter the securities you wish to price at the Issue prompt that follows.

Press the Return key at the Issue prompt to signal that you have finished choosing securities, and QQUOTE sends the prices to your file. Type GO FILTRN and download the file as described above, log off, start up Excel, and tell it to create a spreadsheet using the MAC.DAT file.

Retrieving Historical Quotes

You probably use the PRICES service to view historical securities prices, but, as with current quotes, financial software doesn't require all of the ancillary header information that comes with it. Using the historical securities data retrieval program (GO MQDATA), you can choose items from among three broad categories in the Micro-Quote II database: prices, dividends and descriptive information. Let's select Option 1, "Prices," from the menu of data types you encounter upon entering MQDATA. You are then requested to name a destination file for the data. (You don't want the TTY output option, because that will merely send the prices to your screen.)



An IBM PC-Compatible Approach
Again, if you append a .PRN extension to the filename, the prices will be packaged for use with 1-2-3. At the Issue prompt, enter as many as you want, one at a time. Press the Return key at a blank Issue prompt to signify you are finished. Then respond to the subsequent prompts for periodicity—either daily, weekly or monthly prices —a date range, options and data items. (You won't need to enter anything at the Options prompt because you gave the file a .PRN extension.) MQDATA lets you know when the prices are sent to the file. Then follow the prompts for date ranges and issues. To receive the prices file, type GO FILTRN and proceed as you would for a QQUOTE prices file. Log off and import the file into 1-2-3.

A Macintosh Approach
For the Macintosh spreadsheet, there is a slight difference in your retrieval method. First, you can give the file any extension you want. At the Options prompt, select Option 9, "Tab." Select your items and then let the program run. MQDATA tells you when the file has been created, confirms the filename and returns you to the menu for data types. Type GO FILTRN, download the prices file to your computer and let Excel go to work.

USING SPECIALIZED PACKAGES

The high-powered, specialized financial programs are preprogrammed to variously chart, analyze and make purchase recommendations using financial information that you provide it. Such number-crunching activities require a hearty diet of raw data. In many cases, the software designers have already built in procedures for obtaining it directly from CompuServe via the MQINT or IQINT machine-to-machine data interfaces. These two interfaces don't save information to files (which spreadsheets require), but make raw data available to the screen at a high rate of speed so that a customized software package can absorb the information directly. For the user, the program offers a "no hands," sight-unseen operation that guarantees high speed and accuracy. To find out if your analysis package can accommodate these rapid transfer interfaces, contact the author of your specialized financial software.

Michael Houdeshell is a free-lance writer based in Columbus, Ohio.

Business Brief

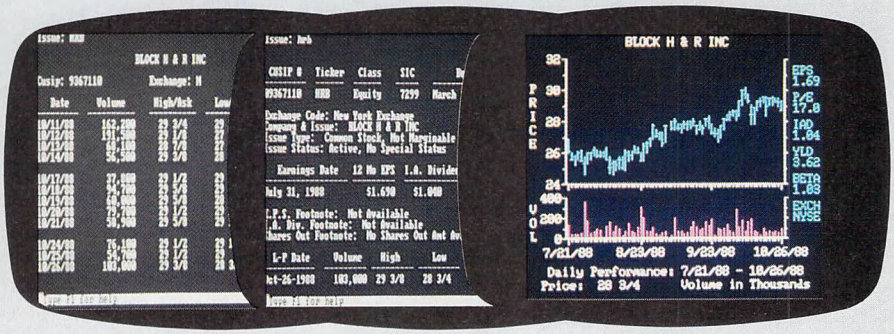
IQuest Database Directory Improved

The online IQuest Database Directory now contains updated database descriptions of the more than 850 databases available.

Each description includes information on the database format, availability of reprints and field searching, the time period of the materials and the frequency of database updates. This information helps you to select the most appropriate database for your needs. A printed form of the IQuest Database Directory also may be ordered online. GO IQUEST

# # #

This month's cover story identifies other ingenious interfaces on page 16.



Find Financial Data for Free with HRB

If you'd like to look closely at a particular surcharged financial product, experiment with report formats or simply take a look at what is available online, you'll want to use ticker symbol HRB to retrieve surcharge-free financial reports.

HRB is the ticker symbol for CompuServe's parent company, H&R Block, and it gives you access to otherwise surcharged databases. You pay only for connect time. To take advantage of this feature, enter ticker symbol HRB at any Issue or Company prompt.

Using HRB enables you, among other things, to try different reporting and formatting options when downloading from databases. This "warm-up" can save you time and online charges.

For example, accessing an historical price and volume graph for an issue (GO TREND) costs $1, but entering HRB at the Issue prompt allows you to plot various time horizons of H&R Block's price and volume levels at no additional charge. In this way, you can use actual statistics to learn more about the product's capabilities. The same is true for a Portfolio Evaluation (GO PORT), Detailed Issue Examination (GO EXAMINE), and many other historical reporting and analysis services.

In addition to experimenting with the pricing databases, you'll find valuable surcharge-free reports from the company information and forecasting databases. These databases, including Disclosure II (GO DISCLOSURE), S&P Online (GO S&P) and Value Line (GO VLINE), are also available using ticker symbol HRB.

To check the availability of free usage in a service, type /H at the Issue or Company prompt.

—MH

Artists Only

Winter Weather Watch

Database Forecasts Changes in the Wind

by Cathryn Conroy

Whether you want to know the weekend's forecast for your Florida vacation or the latest details on the snowstorm blanketing your parents' home in Maine, one of the best sources of weather information is the National Weather Service's Public Weather database on CompuServe (GO WEA).

The database's Short-Term Forecasts offer the weather outlook for local areas and states. Reports are issued twice daily and include the two-day forecast for temperature, winds and precipitation for more than 200 major cities, all 50 states, Puerto Rico and the Virgin Islands.

Although state forecasts give a solid overview, it is common for the weather in San Diego, for example, to be quite different from that in San Francisco. And those who live in the suburbs know that the temperature at their homes can vary from the temperature downtown. Small-town and rural dwellers have an even bigger problem in that the nearest major reporting area might be 100 miles away. A new feature of Public Weather addresses these problems by providing specific weather reports for all areas of the country based on a geographic system of several hundred zones determined by the National Weather Service. The zones are designed to separate areas based on weather patterns.

By typing in your city and state name in the Short-Term Forecasts area, you receive the most current weather report for your city or zone. If a local report from a major reporting city is available, this will be given; if not, the zone report will appear. For example, an area such as Powell, Ohio, which is not one of the major reporting cities, now has a specific forecast instead of relying on the reports from Columbus, an area that is often slightly warmer, wetter and less windy than Powell.

Other features in Public Weather include:

- Extended Forecasts provide a three-to-five day outlook for each state and a six-to-10 day national outlook.
- Weather Warnings offer reports of severe weather, such as hurricanes and tornadoes.
- State Weather Summary gives a detailed report of the previous, current and expected weather patterns for an area.
- Daily Climatological Report offers numbers and statistics of temperatures (including the record highs and lows for the day) and total precipitation, and compares monthly, year-to-date and previous year information.
- Coastal Marine Forecast is ideal for boaters with its reports of winds, water conditions and storms.

Other weather services available on CompuServe include Aviation Weather (GO AWX) and weather maps that feature US radar maps and US depiction maps (GO MAPS) for those with graphics capabilities.

Command the Climate

The wind suddenly begins howling outside your office and snowflakes appear. Wait a minute! It wasn't supposed to snow today. Or was it?

If you don't want to wait for the television or radio weather reports, just log onto CompuServe and take advantage of the new weather command. Type WEA (do *not* type GO first) at any prompt to receive a short weather forecast from the National Weather Service for the node you are calling from. If you want the weather for a different area, type WEA followed by the name of the city and state (such as WEA WILTON, CT).

The report you'll instantly receive includes the current day's forecasted temperature, winds, precipitation, sun or clouds, and the forecast for tonight and tomorrow. You may never be caught without your umbrella or snow boots again!

—CDC

Get the Best Buy with *Consumer Reports*

by Cathryn Conroy

To get the best buy, you have to do your homework, and one of the premier sources to turn to is *Consumer Reports*. Long known and respected for its timely, in-depth and unbiased reports on everything from air conditioners to washing machines, *Consumer Reports* now has introduced an online database on CompuServe.

The electronic version offers instant accessibility and presents the information quickly and efficiently. The database is essentially produced by electronically cutting and pasting the magazine so you can get just the information you want without wading through pages of reports.

The database is devoted to household appliances and home electronics, including audio equipment components, stereo systems, VCRs, computer printers, coffee makers, washing machines and dryers, blenders, air conditioners, microwave ovens and refrigerators. The items are presented alphabetically in menu form under one of four headings: Appliances, Electronics/Cameras, Home and Personal. The article that appears is the most recent report available. As new reports are written, older reports are deleted and the new ones are posted. Selected articles are added on a monthly basis, making the database concurrent with the print edition.

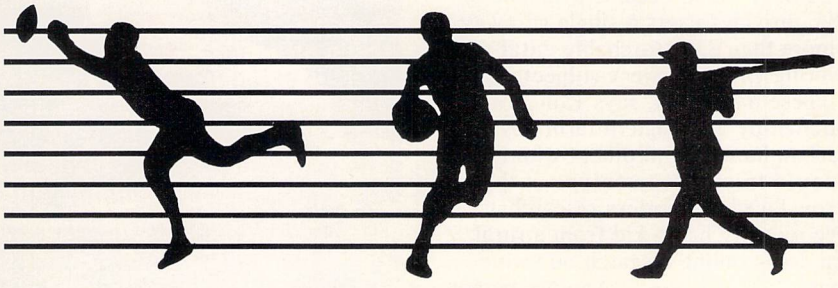
By selecting the menu item of the product you want, you will receive the article that appeared in the print edition of the magazine; however, you also can choose only those parts you want to read. For instance, in a menu format, you can select the general overview, tips on what to look for, *Consumer Reports* recommendations, and ratings of models and how they perform. The ratings are presented in menu form, so you simply select the specific brands you are interested in.

The creation of the CompuServe database is one more way that Consumers Union can fulfill its mandate to provide information to consumers. "Through this database, we are potentially reaching more people, and that means more people will have the opportunity to make informed decisions when they purchase a product or obtain a service," says David C. Berliner, assistant director of Consumers Union. "Advertising conveys only one side of the story. We're not telling people what to buy, just providing the information they need to make informed decisions."

In addition to regular CompuServe connect-time charges, the *Consumer Reports* database carries a surcharge of $2 an article. Through the month of December, the report on 35mm SLR cameras will be offered without surcharge to allow you to become familiar with the online format.

To access the *Consumer Reports* database, type GO CONSUMER.

MORE SPORTS!



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IQuest: Information for 'Just Plain Folks'

by Carole Houze Gerber

To the uninitiated, online research sounds serious, even grim. Information gourmets hunker over keyboards, scanning their screens for that obscurely perfect tidbit so vital to their esoteric research.

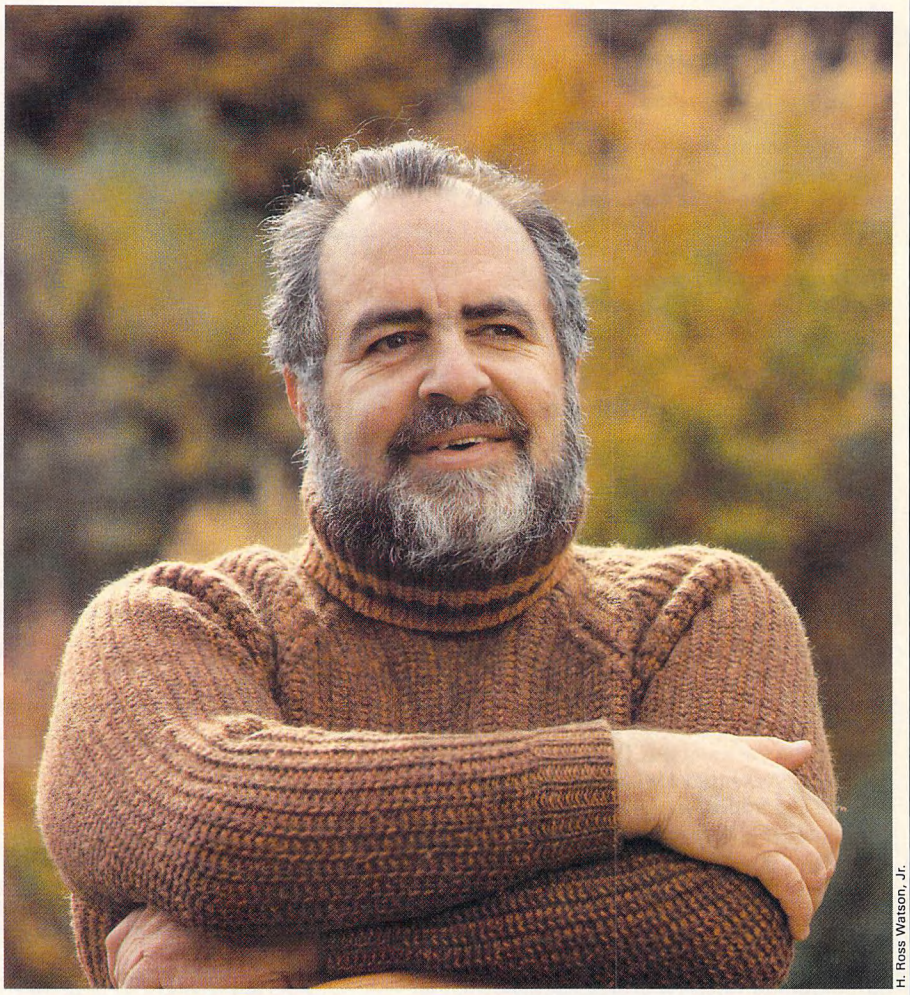
Not so, says Dick Kollin, a database developer, founder of Telebase Systems Inc. and president of Telebase Development, a division of Telebase Systems, a Pennsylvania-based information and communications firm that, with CompuServe, provides an online research tool called IQuest. IQuest (GO IQUEST), which became available in 1986, provides users a single gateway to more than 850 searchable databases covering virtually every subject.

These databases, says Kollin, are searched by Midwestern farm boys, Alaskan hunters and others who are far removed from the stereotype of the furrow-faced, humorless researcher. "We recently had a kid from a rural area doing online research on swine fences," Kollin says. "Another person accessed from Alaska with an urgent request for information on wolves. These are only two examples of people accessing IQuest who are in remote areas and need information quickly."

As in the cases mentioned above, if you are unsure of which database to search, type SOS. A staff of professional librarians proficient in IQuest and headquartered in Bryn Mawr, Pa., will respond in real-time day or night, 365 days a year.

Databases accessible through IQuest range from the obscure—Kollin says the pig-pen researcher should have first checked the AGRICOLA (BRS Information Technologies) database—to old standards such as ERIC (Dialog Information Services Inc.), a huge educational database. Another specialized database is a compendium of back issues of *The Miami Herald* (VU/Text Information Services Inc.) in Spanish. "There's definitely something for everyone in IQuest," Kollin says. "And it's all in one place."

Two types of databases, bibliographic and full-text, are available through IQuest. Bibliographic databases provide reference information, such as author, title and the magazine in which the article can be found. Many include abstracts of the original article. Full-text databases, which make up about 60 percent of IQuest's offerings, provide entire articles. The cost for a basic search is $9, and a few databases carry clearly marked additional charges of $2 to $25.



H. Ross Watson, Jr.

IQuest tracks swine fences, wolves and more 'conventional' topics: *Kollin*

If your first search yields no information—or "hits"—there is no charge. Subsequent "no-hit" searches cost $1 each. Complete details of IQuest charges for abstracts, overnight deliveries of hard copies and other special services are shown online.

The best way to ensure "hits," says Kollin, is to carefully define the terms of your search. "There's a database called the Religion Index (BRS Information Technologies) and inexperienced researchers will get on and use 'God' as their search term," he reports. "Of course, they get half the Index because they haven't narrowed their search."

Kollin, who holds degrees in library science and engineering, compares searching to landing an airplane. "You don't want to either overshoot or undershoot the runway. You've got to get right down there where the tarmac is."

"Getting to the tarmac" takes practice, and that's why Kollin recommends that most people use IQuest-I, which guides users through a series of menus that help define their search. A few simple steps walk novices from log-on to log-off, no matter what database is accessed.

Another version of the service called IQuest-II enables users to bypass menus and directly enter a particular database.

IQuest has recently become even more efficient. "It's significantly faster than it used to be," Kollin explains. "We have direct lines to vendors now —it's really been improved. Speed is everything when you're in a menu world and IQuest has gotten very speedy. If you haven't gone into IQuest lately, I urge you to take a look."

A New Way To Tell Your Bills Where To Go.

And Get Away With It.

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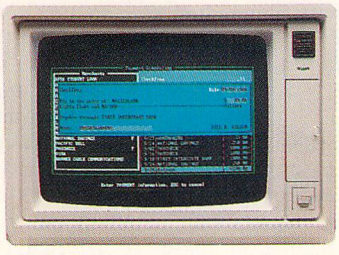

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INGENIOUS INTERFACES

The New 'Net Workers' Speed Online Access

A user interface is a philosophy manifested in software, a program dedicated to the proposition that computers should help people use computers.

It's a shame that the term "user friendly" has been reduced to cloying cuteness by years of advertising blarney. When new, that phrase best articulated the goals of user interface software—that is, to step politely between man and machine and facilitate their communications with one another.

User interfaces have taken different forms over the past decade. In the online world, they have ranged from simple "script files" that record and replay a few frequently used commands all the way to completely automated terminal programs.

And the beat goes on. Software designers at CompuServe are currently considering new ideas in interfaces that ultimately will change the way CompuServe transmits data to us. In the future, a new user protocol, now in the testing stages, will enable much greater teamwork between CompuServe's host computers and the terminal software on our microcomputers.

Early Interfaces

To see how user interfaces started, think back to when many early users of complex systems, such as Ashton-Tate's dBase, were programmers who were comfortable with such a database system's elaborate command language. Subsequent users, however, with neither the time nor inclination to learn the language, welcomed menu-driven interfaces. These customized interfaces harnessed dBase's power by receiving a user's choices as selected from specially designed menus, translating the selections into commands that dBase could recognize and then displaying the results in a way the user could understand.

Such interfaces were composed for many applications, from spreadsheets and word processors to software that allowed a user to interact with the disk operating system through pull-down menus. "User interface" came to mean software that employs the resources of a personal computer to customize and simplify complex application programs and utilities.

User interfaces are not a new idea in data communications. On the contrary, an interface of another kind—on the *host* end of the connection—has been in place on CompuServe for years. Longtime subscribers will remember that in the late 1970s the system was known as "Micronet." In those days, users logged into their own "programming areas" and, from a terse OK prompt, reached various features in a way that was similar to how they could "run" programs on their micros offline. By typing the command R BULLET, they told Micronet to "run"

by Charles Bowen

(or "request") the National Bulletin Board feature, while R MAIL would run the electronic-mail program.

Later subscribers got to know CompuServe in a different way: not as solitary programming areas from which they launched themselves, but rather as a system of interlocking menus and accommodating navigational commands —an extensive, friendly interface that CompuServe automatically runs at each user's log-on session.

This interface, which produces the elaborate tree of ASCII menus we see, has served us well over the years. It is descriptive enough to help new users, can be abbreviated by parameters set in the Terminal/Options area (GO TERMINAL) and even can be turned off completely by an option in the Personal File Area (GO PER).

New Generations

Meanwhile, the next generation of telecomputerists has begun introducing its own interfaces to the online community, and these add an important new concept: automation. Besides translating and "humanizing" commands and menus, these new interfaces also save us connect-time dollars by automating some tasks. Because much of what we do online is repetitious—checking the same resources today that we checked yesterday and last week and last month —software designers created new software to take advantage of the user's computer by "recording" and then "replaying" frequently executed command sequences.

In the early 1980s, online wizards first tackled automation by creating communications programs that recognized *script files*. The idea of script files, sometimes called "command files," is this: the user creates a file containing a series of online CompuServe commands, then executes it from within the communications program. The file can be used over and over, implementing multiple commands with just a few keystrokes.

Suppose you regularly read the daily computer news in *Online Today Daily Edition*, and you want to automate the process by putting the commands into a script file. You could use your word processor to create a simple file like this:

```
********************************
TRANSMIT "GO OLT-90"
TRANSMIT "S ALL"
********************************
```

The syntax of script languages varies somewhat among communications programs. Some use "SEND" instead of "TRANSMIT," others don't use quotation marks around the command to be transmitted, and still others use a symbol at the end of each line to represent a carriage return. However, the idea remains the same: the first line tells the terminal program to send the command GO OLT-90 (taking us to *Online Today*'s menu of daily computer news) and the next line transmits the command S ALL (meaning "scroll all of the items on the menu").

This file could be saved on the disk as OLT and then when you wanted to read the day's computer news, you could tell your communications program to execute the "OLT" command file.

Unfortunately, not all communications programs support command files. (CompuServe's Professional Connection does. So does the CompuServe Navigator program for the Apple Macintosh. Major third-party programs also support scripts, including Crosstalk, SmartTerm, Procomm and QMODEM.)

Moreover, even terminal programs that do support scripts can differ greatly in their sophistication. At a minimum, most script languages allow you to automate your log-on routine, that is, save your CompuServe User ID number and password in a file that can be transmitted to the system. Most also let you store a few command sequences. More advanced terminal programs have scripting features that are as sophisticated as any programming language, including logical operators (AND, OR and NOT), conditional branching (IF ... THEN ... ELSE), assignable variables (LET A=), subroutines, limited math functions and input routines.

So, with varying sophistication, scripts let you interact with CompuServe, performing elaborate operations such as automatically logging on and issuing commands to carry out tasks. Some script languages even provide for time-delayed action, storing commands that will be executed at a predetermined day and time, according to the computer's built-in clock.

In addition, most good command languages allow you to direct your script to "wait for" a specific prompt from the system, using it as a kind of signal for the next commands. This concept was a major breakthrough in the field of user-friendliness a few years ago. It became particularly important in the next wave of user interfaces.

The more complex the script language, the more time you need to devote to learning it. However, scripts will save you time in the long run because the computer can transmit commands much faster than you can type them manually. It also doesn't get bored and careless because of repetition, and command files free you to do other things, such as read printouts or grab a snack, while the computer performs the script you have written for it.

The greatest advantage of scripts is that they are customized. Because you write them yourself, you can address your own unique online chores. And scripts can be written for various online services. Some command files can be written specifically for CompuServe, while others (used in the same terminal program) can be composed to interact with a local bulletin board system and other information services. Crosstalk Forum Administrator Sheldon Hall has developed many scripts for use on CompuServe that can be found in the Crosstalk Forum (GO CROSSTALK).

These new interfaces save us connect-time dollars by automating some repetitious tasks.

On the downside, good script-writing can be as time-consuming and complex as writing a program. For that reason, some telecomputerists, like that second wave of dBase users back in the early 1980s, aren't interested in learning the ins and outs of a complex script language. For them, a newer idea in interfaces is more appealing: the fully automated, dedicated communications program.

Automated Terminal Software

Automated terminal software uses much of the same basic technology as command files, but the programming takes it one giant philosophical step forward. Instead of automating merely one online task, these programs can manage the user's entire online session, from log-on to log-off, by incorporating a number of scripts into a single interface.

Typically, the user starts offline, making selections from a menu to tell the program what tasks to perform, such as checking news in specific forums and retrieving EasyPlex messages. Once the user has laid out the jobs, the program automatically logs on and carries out the assignments, quickly saving new messages to disk files as it goes. The user later reads the saved files at leisure, composes replies offline, perhaps using a word processing package, and instructs the program to log on again and post them.

The software is able to do this because of the programming concept of a computer "waiting for" specific prompts from CompuServe. Like an individual script file, the fully automated interface transmits specific commands, then watches the subsequent ASCII menus, waiting for a specific prompt or message. When signaled by the receipt of the anticipated text, the program knows to execute its next command. This single function has led to some exciting software ideas.

In the summer of 1983, Howard Benner, a Maryland-based software programmer, wrote a program called SUPER.SIG, which automated much of the reading and writing of messages in CompuServe forums. SUPER.SIG let the Model 100 log on and automatically handle a number of preselected chores. When Benner placed his creation in the forum's library for downloading by other members, it was a hit. New versions followed, incorporating refinements suggested by the program's enthusiastic users.

Today an enhanced version of the automated program is maintained in the Tandy Model 100 Forum (GO M100SIG) in its Library 3. The program is in a file called SMART.SIG and the instructions are contained in SMART.DOC.

The first widely accepted program—AUTOSIG—was born in the IBM Users Network (GO IBMNET). Programmers Vernon Buerg, Frank Lipschutz, Don Watkins and others designed AUTOSIG for what was then the relatively new IBM PC.

These days, AUTOSIG has thousands of dedicated users. Don Watkins, IBMNET administrator, took on the regular update of the program as a personal project, and one entire subtopic of the IBM Communications Forum (GO IBMCOM) now is devoted to it. For the latest copy of AUTOSIG, see Library 1 of IBMCOM.

Floyd Dean Inc.

Interfaces speed transfers: *Benner*

A Good Idea Spreads

Meanwhile, Benner turned to Turbo Pascal for his next creation, TAPCIS.

While SUPER.SIG and AUTOSIG are public-domain software, free for the downloading, the IBM-oriented TAPCIS (originally called ZAPCIS) is a shareware program, meaning Benner asks those who download it and like it to pay a registration fee. The TAPCIS Forum (GO TAPCIS) opened in early 1988 to provide support for the program.

Automated programs, which usually concentrate on functions in the forums, have attracted new users to the system. For instance, Andrew Tobias, author of several business books, including *The Only* Other *Investment Guide You'll Ever Need*, and creator of the *Managing Your Money* financial software, was frustrated with his early attempts to use CompuServe, not having the time to study the system's commands and structure.

"Then I got TAPCIS," he says, "and became CompuServe's biggest fan." Tobias says automated terminal software "makes all the difference in the world" for monitoring forums.

"I now log on painlessly once or twice a day by pressing just two keys when I turn on my computer," Tobias says. "I read the paper for a couple of minutes while TAPCIS gets everything that might interest me, logs off and

How to Compose a Custom Script

If you're interested in experimenting with automated terminal software or script files, your first stop should be the CompuServe forums specializing in your particular kind of computer.

Dozens of forums are devoted to specific hardware and software. Use the FIND command to locate them. At any prompt, type FIND followed by the keyword (such as FIND IBM or FIND COMPAQ), and the system creates a menu of related online services.

In the forums, first check the libraries and message boards for information about such programs. If you can't find what you're looking for, leave a message for the forum's administrator. Be sure to check back regularly for your answer. In many busy forums, messages scroll off the board in a day or two.

Fully automated terminal software hasn't been written for all computer types. However, most systems now have at least one communications program that uses script files.

If you want to try your hand at script-writing for your communications program, it is best to start simply. The biggest mistake in command file writing, as in programming, is picking a project that is too ambitious before you've practiced the fundamentals.

Start by studying your terminal program's script language. Syntax varies from program to program. Pick out a couple of fundamental commands, such as the one that transmits to the system (it could be TRANSMIT, SEND, REPLY or SAY, depending on your specific script language) and the one that waits for a prompt or menu from the system (such as WAIT, WAITFOR, LISTEN or MATCH).

Then try automating a simple task that you usually do manually, such as visiting *Online Today Daily Edition*'s menu of computer news (GO OLT-90) and scrolling the stories. Remember that, because you're composing a script to use over and over, you need to depend on those things that are constant rather than those that change frequently.

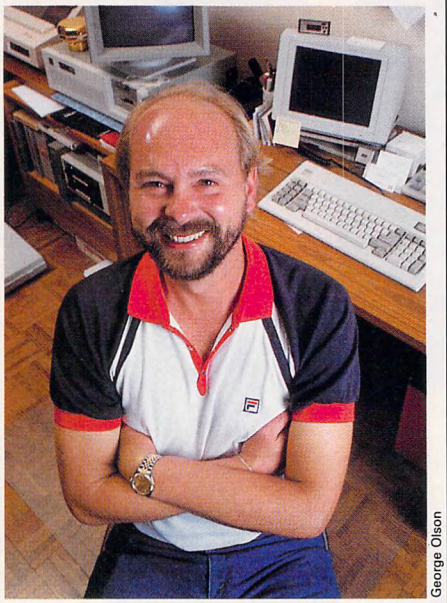
For instance, on some days there are eight stories on the OLT-90 menu. But you wouldn't want to have your script always transmit the command S 1-8 because on other days the menu contains 10 or 11 stories. Because

beeps. Then I mark the items that do interest me, press one more key and go back to the newspaper. Three minutes later it has logged on, retrieved the full text of the messages I've marked, logged off and beeped. I then take my time answering the messages that require it, with TAPCIS' very adequate word processor, and press one final key. Three minutes later it has logged on, sent my messages and logged off."

Automated software continued to spread to other machines. One of the newer ones arrived last summer in the online Atari computer world. ST/Forum was written by Charles McGuinness, a highly regarded online programmer who has designed software for several kinds of computers over the past half-dozen years.

McGuinness' public-domain program is available in Library 13 of the Atari Development Forum (GO ATARIDEV) under the filename STFRM.ARC, with the documentation saved in STFRM.DOC.

Programmer Mike O'Connor of White Plains, N.Y., developed a shareware program and originally distributed it in the Macintosh Personal Productivity Forum (GO MACPRO). O'Connor's program, which speeds along online tasks by allowing the Mac owner to use a mouse device to point and click at features to use online, was picked up by CompuServe and today is marketed as CompuServe Navigator.



George Olson

Forum team automated IBM PCs: *Watkins*

"From the beginning, the program has had a lot of user input in its development," says CompuServe's product support representative Alec Sutliff, "and it still does." Sutliff notes that the primary source of information and support for the program still is the MACPRO Forum, where it was born.

CompuServe Navigator now is available in retail computer stores or can be ordered online (GO ORDER). Meanwhile, O'Connor has been completing work on enhanced version 3.0 of the program for release next year.

Benefits and Concerns

Without a doubt, the advantage of this kind of software is the ease of use. It offers sophisticated automation without the user having to program in a script language, because the scripts already are built in. These programs depend on most of us being interested in doing basically the same things online. That way, one set of general scripts, incorporated in a single program, can serve the needs of many.

A disadvantage—at least for telecomputerists who visit several different resources via modem—is that the fully automated programs are dedicated to CompuServe alone. While a general-purpose terminal program can have scripts written for any number of online services, programs such as TAPCIS, AUTOSIG, ST/Forum and CompuServe Navigator are meant to work only with CompuServe, because they depend on specific aspects of CompuServe's own menu interface.

To some observers, this reliance on existing ASCII menus and prompts transmitted by CompuServe can lead to further difficulties.

"The problem with scripts and fully automated programs," says programmer Gary Yeauger, supervisor of CompuServe's forum development, "is that if the interface on the host end is changed, they break. In other words, they're too dependent on the appearance of the existing online interface."

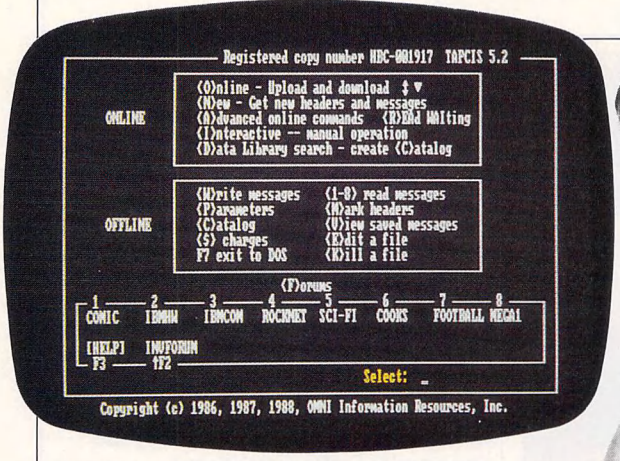
Yeauger notes that earlier this year, when CompuServe introduced a major revision of its forum software, the automated terminal programs had to be rewritten. But then, even a minor change in a single prompt could send such a program into a tizzy if the software happened to be waiting for that specific message from the host as a

OLT-90 changes seven days a week, you want to use a constant command, such as S ALL to tell the system to scroll all the items on the menu, no matter how many articles are present.

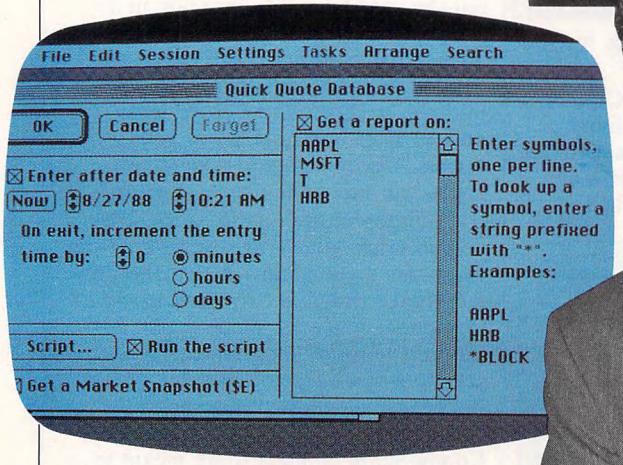
Here are a few more tips:

- Research the feature you want to automate. Most communications programs have a way to "log" a session, that is, to save all incoming and outgoing text in memory or on a disk for rereading later. Use that feature to log sessions over a couple of days. This allows you to practice with the commands that you ultimately want included in your command file and find the constants that you want your script to wait for.
- Don't be too anxious to write scripts that can run completely unattended. Sophisticated script languages usually support "time-delayed" scripts (those that can be set to activate at a later time), but online veterans recommend that you use that option carefully. Neophytes sometimes outsmart themselves with time-delayed command files by overlooking a possible prompt and causing the script to crash without logging off, thus possibly racking up a few dollars in unexpected connect-time charges. It is best to reserve delayed-action features for logging onto a local bulletin board system, where long-distance charges and connect fees aren't involved.
- If you insist on using time-delayed command files on commercial services, carefully study your script language. There is probably an option for jumping to a log-off subroutine if the prompt the script is waiting for doesn't appear in a specified number of seconds or minutes.
- Finally, get to know your fellow script-writers. Computer-specific forums have members using a variety of communications software, including the scripting features. Forum libraries often contain scripts other members have written. Some can be used as written; others are teaching aids to help you compose your own scripts. And, of course, the message boards of your favorite forums are great places for questions and answers about script language features.

—CB



TAPCIS made noted author "CompuServe's biggest fan": *Tobias*



Mac point-and-click features in CompuServe Navigator: *Sutliff*

Greg Miller

signal to do something.

Concern over such issues has some people pondering the future of user interfaces, sometimes from new perspectives. The latest idea at CompuServe is a concept called "the host-micro interface." HMI is a protocol for the future that is intended to dramatically improve the way personal computers and CompuServe communicate with one another. To do that, HMI employs a convention for a closer cooperation between machines.

A Future of Equality

To see it in perspective, think about the current interface CompuServe installed at the end of the "Micronet" days. When CompuServe's consumer service started 10 years ago, most personal computers were no more than a step or two above "dumb" terminals. They could display ASCII data received from the host computers but little else.

That's why CompuServe designed its host interface as it did: a system of connected ASCII menus. There were disadvantages—it was slow and inefficient to have the powerful minicomputers on CompuServe's host end constantly transmitting all those complete menus—but at least it was a system with which virtually any kind of microcomputer could communicate. No special software was required; any terminal program—from plain-vanilla to state-of-the-art—could be used. That was essential for the period, because numerous types of personal computers were being used with few standards among them. The last decade has seen phenomenal growth in personal computers. In speed, graphics and processing power, micros have surpassed the best predictions of the early industry seers, leading to a new generation of fast, colorful and powerful software.

Only in data communications has the growth been less obvious, because no matter how sophisticated communications programs become, they still are communicating with a generic host interface that was designed to accommodate the least common denominator. That is to say, you could have the hottest terminal program on the electronic road, but most online services treat you as if you got there on the bus.

However, hints of a change are in the wind. Some observers say that the next era in online computing will come from capitalizing on the new-found power of the microcomputer. The new idea in interfaces is to make the business of communications a more equally shared task between micro and host. The host-micro interface protocol being designed at CompuServe will do that by changing the basic way the system transmits data. Instead of sending all that time-consuming ASCII data in the form of menus and prompts, the new thinking is to transmit compressed binary data, which then could be translated by a receiving microcomputer running a terminal program specially designed to recognize the protocol's conventions. Several advantages are apparent. The first is speed. Receiving compressed binary data (even with the time it takes to convert it to something readable on the receiving end) is considerably faster than receiving the thousands of bits of data needed to construct a single ASCII menu.

But more important, HMI allows CompuServe to interact with the powers in the users' microcomputers. HMI coordinates the micro's resources with those of the host computers in ways that have never been seen before on commercial information services.

For instance, presently if you walk through a series of menus online and then need to back up to one or two of them, CompuServe must take the time to retransmit the data to you, even though you've already received it once. On the other hand, with HMI, your own terminal software could simply save in memory all previously viewed menus. It then could save you time and money by flashing the previously viewed menus onto the screen without having to ask the system to resend them.

Further, information sent under error-checked protocol corrects for line noise, an important advantage for script users and automated programs.

Also, contemporary programming features so common in other software these days—windows, pop-up secondary screens, pull-down menus, bar cursors, sound and graphics enhancements, and mouse interfaces—not only could be widely used in terminal programs, but also could interact with CompuServe through binary signals sent back and forth. For example, instead of having to enter numeric menu choices, the user could routinely make selections with a bar cursor on a windowed menu.

This idea of using the micro's own conventions online has appealed to CompuServe software designers for some time. For instance, the CompuServe Navigator program for the Apple Macintosh supports such point-and-click mouse ideas.

Finally, in terms of the current "wait for" problem that always threatens automated programs and script files, the host-micro interface offers a new solution. Instead of making automation ideas so dependent on the characteristics of an ASCII menu or prompt, the new protocol offers binary signals that are less likely to change.

CompuServe expects to begin testing the HMI protocol next spring with some IBM and Apple Macintosh programs as well as incorporating it into Navigator version 3.0. Also, software toolkits are to be available to assist major third-party software publishers in designing communications programs that recognize the new protocol.

Not everyone will be sampling HMI right away. Obviously, the current ASCII version of the host interface still will be available for those communication programs that don't yet support the new protocol. This means that sophisticated scripts and increasingly popular automated terminal programs will continue to be important to CompuServe members. They're all part of the same tradition of programs that have computers helping people use computers.

Charles Bowen, a contributing editor of Online Today, *co-authored* How to Get the Most Out of CompuServe *and* CompuServe for IBM PC Power Users. *His CompuServe User ID number is 70007,411.*

# # #

Explore financial interfaces that marry spreadsheets and analysis programs in a union of convenience. These rapid-transfer interfaces are explained on page 10.

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TAProom Tales: TAPCIS Forum Provides Plenty of Room to Talk

by Joe Noethlich

TAPCIS, a software package for IBM-compatibles that automates online actions in CompuServe's forums and EasyPlex, now has the perfect complement: full-time support in the TAPCIS Forum (GO TAPCIS).

"The TAPCIS Forum is a labor of love for us," says Howard Benner, author of TAPCIS. He and Richard Wilkes, primary administrator of the forum, are "great believers in this medium and its future."

When the TAPCIS Forum opened its doors, people flocked in—nearly twice as many joined the first day as Benner had expected. "We got off to an incredible start," Benner says, "because the regulars we invited for a preview got involved immediately. The forum averages 300 messages a day now. And the reaction from our members is tremendous."

Previously, new releases of TAPCIS sent users scurrying to converge on one forum or another. According to Benner, the ensuing discussions about TAPCIS temporarily overwhelmed that forum until the flurry of questions, opinions and advice subsided. The message was clear: TAPCIS users needed a forum of their own.

"The main need was a way to provide nearly instantaneous help to people who expect nothing less from their interactions on CompuServe forums," Benner says. "They now have 24-hour contact with me, hosts of experienced users and a couple of extraordinary assistant forum administrators: Joan Friedman and Marilyn Ratcheson."

In addition to technical support, TAPCIS users sought a place where they could gather to confide and cajole, discuss and declare, and hoot and holler. In response, there is the TAProom, Section 7 of the forum, which provides an opportunity for conversation that Benner characterizes as ranging from the sublime to the ridiculous.

Michael Mohlé, a member of the forum, agrees with Benner's description. In addition, Mohlé says, "I've seen threads with nearly 300 messages, talking about nothing in particular, but in great detail."

Although the TAProom offers members the opportunity for unbridled personal expression, the majority of the activity within the forum deals with questions and experiences related to the TAPCIS program and how to use it.

"By far the most frequent questions have to do with modem hookups and various combinations of software that are causing problems," Benner says. "Because members see discussions of the problems that others are having, they learn through each other's experiences."

TAPCIS troubleshooter: *Friedman*

"Life in a fishbowl is both good and bad," Benner observes. "Electronic troubleshooting isn't always easy, but it is usually effective.

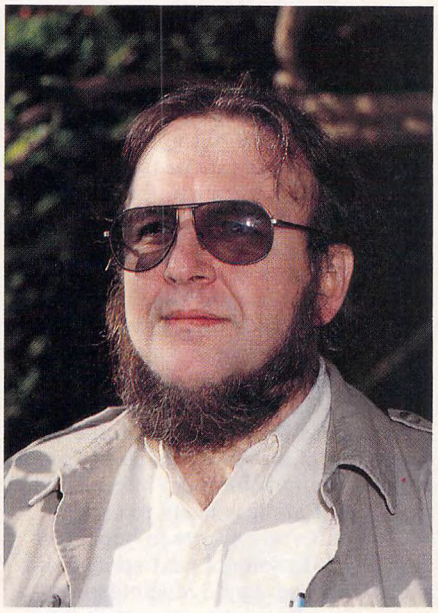
"We get some interesting exchanges with subscribers from outside the United States," he says. "They often have to go through a morass of government agencies and packet switchers just to get the familiar User ID prompt that most of us get so easily. But many of them have stayed around after fine-tuning TAPCIS."

To help keep his product competitive, Benner stays responsive to those who use it. But improving and enhancing TAPCIS means changing it. To ensure the quality of new versions, other users must also test them.

For nearly two years, TAPCIS beta-testers had to borrow space from other forums to do their testing. Benner says, "I've tested lots of products, and it can get lonely knowing that a couple dozen other people are doing the same thing but no one knows what others are finding, or even who they are."

Now, however, TAPCIS beta-testers can work in a special area of the TAPCIS Forum, and they can easily contact one another. This speeds the process of testing and improves the quality of new versions of TAPCIS.

"Ensuring that beta-testers can talk with one another is the only way to go," Benner says. "It's not unusual for me to make a midnight upload and see comments, questions and suggestions waiting when I make my first run in the morning. There's nothing like instantaneous feedback to keep interest in a project hot. It's a win-win situation," he says. "Testers help shape the future direction of the program, and I get the benefit of their counsel."



Steve Waskow

Myriad message threads: *Mohlé*

The TAPCIS program is available in Library 1 of the TAPCIS Forum.

Joe Noethlich is a free-lance writer based in Columbus, Ohio.

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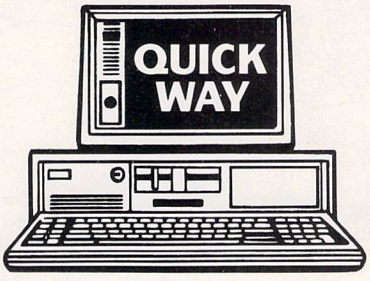

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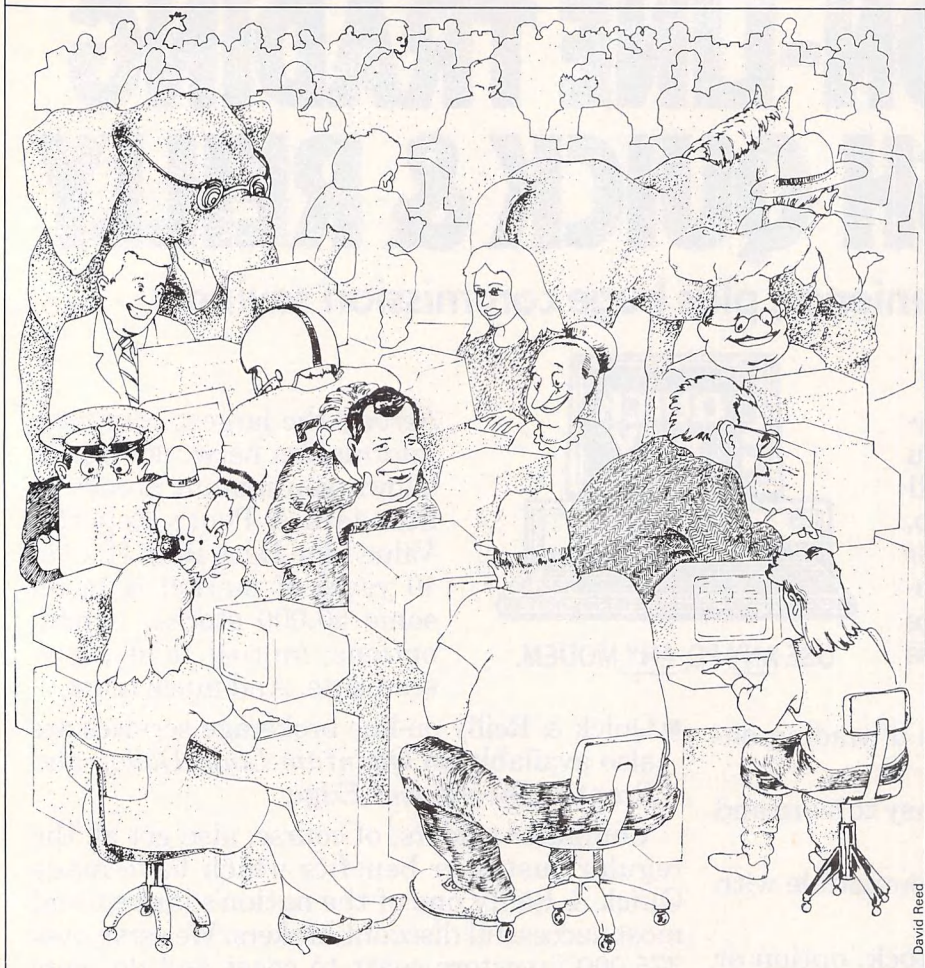


David Reed

Greet and Meet the World

CBers Celebrate, Laugh and Confide On- and Offline

by Gayle Brown

Duane Morin started hanging out on the CB Simulator when he was 14, so "I could talk to 30-year-olds." Now a sophomore at Wooster Polytechnical Institute in Wooster, Mass., Morin reminisces, "I grew up on CB."

In the beginning, Morin (who uses the handle "Jc" online) bagged groceries to pay his connect-time fees. While he isn't online as much now due to his studies, Morin says he does his best to keep in touch with the people he has met, even though they live in different parts of the country.

"It's the greatest way in the world to make friends," he says. "There is so much more to this medium. On CB, you can show emotion and non-verbal action by placing text in brackets. You can talk and share with people from all over the country."

One of Morin's fondest CB memories is the celebration of his 16th birthday online (on Channel 16, naturally), complete with people singing and dancing and a CB artist's version of a cake with candles.

Humor is also possible on CB, and the proof is in Mike Warren's popular online imitation of David Letterman. Warren, who is employed by a small laser R&D/manufacturing company, uses the handle "David L." to perform his CB comedy routine. Often beginning "But, ya knowwwwwww, seriously, folks...," Warren's routines include Letterman-style Top 10 lists and one-liners at the friendly expense of everybody else on the channel. "I'm not Dave," he types, "but an incredible simulation <RIMSHOT>. Ask for me by name, accept no substitutes—you'll be glad you did."

Warren says he became interested in CB in 1983 after visiting the Commodore Information Network. "I needed some information on Commodore software. I went to one of the forums, and someone told me about CB.

"You meet all kinds of people on CB. We have a guy who windsurfs, lots of computer professionals, a cartoonist and a couple from Jersey with a houseful of kids. You name it, they're here." Warren attends the monthly CB brunches arranged by area CBers in Los Angeles to keep up with his online friends.

"The parties and gatherings are the best way to make friends," says Joyce Fuller, known as "Buttercup" to her CB pals. "It's quite rewarding to walk in and hug someone you have not seen but have 'talked' to online for a long time. It's an experience you can't find anywhere but on CB."

Fuller suggests that newcomers try to go to a local CB party. Parties are usually organized by CB members themselves and, depending on the members involved, they can be informal or very elaborate. About meeting CBers for the first time Fuller says, "It makes you a bit nervous when you don't know the group. But once you're there, it's like one big family. If an out-of-towner comes in, we all do our best to make him feel comfortable."

Get-togethers are usually announced in the online CB Society column by Terry Biener ("Cupcake"), along with members' engagement and marriage announcements, and a Who's Who listing of new members' home states, ages, careers, hobbies and interests. Most items are submitted to Biener by the members themselves. CB Society, which is available to all CB members, keeps them abreast of the CB events calendar.

While members may opt to keep their identities secret, Fuller says others tend to be cautious about people who change handles often and refuse to "talk voice" by phone or to attend CB gatherings. "I think you would be surprised at how close some of us get from meeting on CB. Then there are those who prefer to remain behind a screen. It's up to the individual."

"At first, I just lurked a bit," says Jessica Ostrow—"pAtChWoRk GiRl" to her friends—of her first few times on CB. "Lurking" is CB talk for watching conversations on a channel but not participating in them.

"I have a hearing impairment and CB is great for me," Ostrow says. "That's not my main reason for being on CB, though. It's a good way to communicate. Some people just have a way with words."

Ostrow spends so much time online

that she says she would be broke if not for the CB Club special rates. The CB Club (GO CBCLUB) allows members to reserve handles so no one else can use them. It also offers members a "package deal" price break on the hourly connect-time rate. "For the $25 club," Ostrow says, "you pay $25 a month, and whenever you're on CB you pay only $4 an hour. If you spend $100 a month, you pay only $1 an hour." These rates apply for speeds up to 1200 baud, which can mean as much as a $11.50 per hour savings over regular rates.

CompuServe also has a special flat-rate holiday plan for December and January. For unlimited use during weekends and holidays and between 7 p.m. and 8 a.m. weekdays, CBers pay just $70 per month. Communication surcharges still apply.

CB Club members receive *CB CLUBletter*, a newsletter containing updated information on CB developments and advice to new members. Edited by Pat Phelps, CompuServe CB product manager who is also known as "LooLoo," it can contain invitations to discuss "CB ethics," lists of new features available and photos from the latest CB bash. Phelps takes requests for features from CBers seriously.

Fuller, who has been on CB for many years, says that she has seen CB go through many changes because of such requests. "We have all asked for changes as our needs required them over the years. LooLoo has given CB a real 'home' feeling, and has taken good care of us. She has worked hard to give us a decent place to come and relax."

"CB has been around a little more than eight years," says Phelps. "Sandy Trevor, CompuServe's executive vice president for support services and chief technical officer, wrote the first CB program at his kitchen table. Then there was only one band with 36 channels and you would wait a long time before somebody would finally show up. Now, CB membership is in the thousands. Sometimes, late in the evening, there will be hundreds of simultaneous users online.

"CB is unique because you can be as anonymous as you like," says Phelps. "But most people are on CB because they want to meet people. I've seen some really shy people open up through CB. Now they're 'party animals'—going to the brunches or having parties of their own."

Phelps says that CB was installed when the service was called Micronet and most members were programmers. "Those were the only people who had personal computers back then. There was a lot of technical talk and a lot of 'hardware wars'—you know, 'my machine's better than your machine.' Now, many homes have computers, and you don't have to be computer literate to use the service. You just get the software and get online.

"So now we have a much wider range of people on CB," says Phelps. "We have bus drivers, librarians, housewives, nuclear physicists, doctors, lawyers, veterinarians and airline pilots. It's a much broader mix.

"CB is now used worldwide," she says. "While the big CB question used to be 'What language do you program in?' it now can be 'What language do you speak?'" There is an increasing number of foreign CB members who are seeking the same thing as their English-speaking counterparts—to meet people from all over and establish lasting friendships online. CB passers-by may encounter other newcomers, such as Masunori Kusaka (alias "Don Japan"). "Hello" he'll type, translating from Japanese to English and back again. "I am 36 years old and have a wife and two daughters. I live in Kyoto, Japan. I am an architect and am planning housing estates. I would like to meet more people in the world through CompuServe."

Gayle Brown, a graduate journalism student from Ohio University and a former technical writer, is an Online Today *editorial intern.*

CB Newcomers—Jump Right In!

Curious about CB? The best advice for any newcomer, according to Pat Phelps, CompuServe CB product manager, is to jump right in.

"Remember, no one will know who you are or where you reside unless you tell them," Phelps says. "So relax!" She also recommends trying a less-crowded channel for your first few visits.

And don't be distracted by the rapidly scrolling text. To keep your communications threads straight, don't look at the screen when you type. Type in your message and then look up and read the incoming messages.

Most CBers, says Phelps, are more than happy to help a novice. Entering a channel and simply typing "Help. I'm lost!" may be all you need to do to become familiar with the system.

To access the CB Simulator, type GO CB. You are asked to select a Band (A or B), a handle and then a channel. Some channels are designated for specific uses. For example, Channel 1 is for adults, 7 is for young adults 18 to 25 years old, 17 is for teens, and Channel 22 is for senior citizens. A list of channels and their designations, if any, is provided online. Don't be afraid to jump channels until you find one that suits you. The channel labels are only for reference; you are welcome on all of them.

To check out the special monthly rates available for CB Club members, type GO CBCLUB. Joining the CB Club will allow you to reserve a handle within asterisks, meaning it is unique. Someone else may be able to use the same handle, but he or she will not be able to place asterisks around it. Your friends will come to know you by that handle, and will not confuse you with another person having the same or similar handle.

And finally, no CBer can get along without knowing some of the basic commands that can make life on CB more fun. (Commands can be abbreviated to a slash and the first two letters.) Here are a few:

/BAND X lets you jump to the other band (either A or B) on CB.

/BREAK lets you exit from a private /TALK.

/CHANNEL XX lets you jump to a specified channel.

/EXIT returns you to the CB main menu.

/HANDLE XXXXXX lets you select a new handle.

/HELP displays a list of available CB commands.

/PAGE XX lets you page or send a private hello to the person with the job number you specified.

/PROFILE XX displays the profile (User ID, handle, birthdate, occupation, interests and more) of the CBer with the specified job number, provided the CBer is online and has submitted a profile.

/TALK XX lets you go into a private talk area with the CBer with the job number you specified.

/USERS displays the job number, User ID number, node and channel for everyone who is on the same CB band at that time.

/USERS XX lets you get the same list for a specific channel.

/WHO displays the information for the user who last transmitted on your channel.

Photo Forum Focuses on Winter Contest

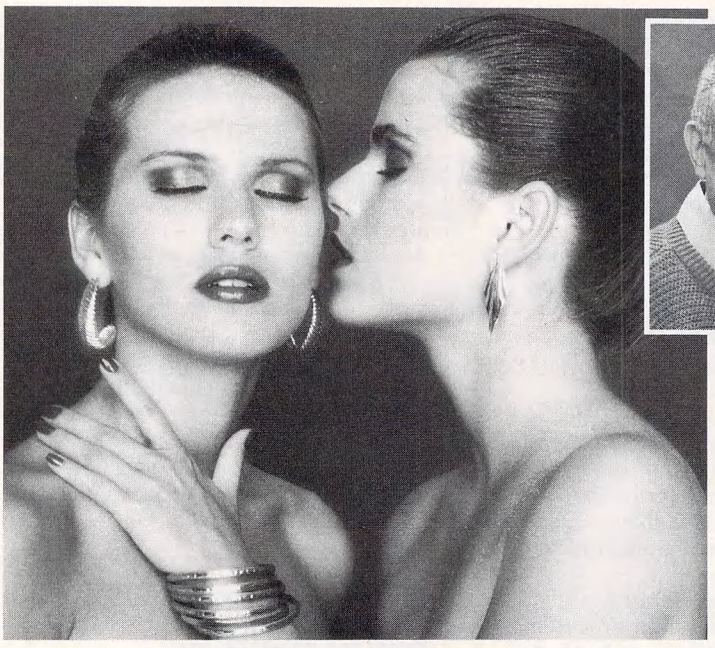
by Carole Houze Gerber

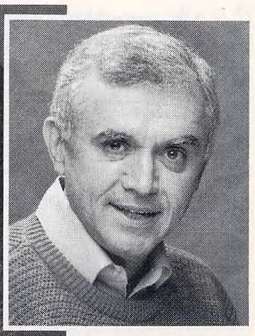
Calling all amateur and professional photographers. The Photography Forum (GO PHOTOFORUM) wants your best photographs for its latest biannual contest, featuring quality prizes and the opportunity to have your work displayed in an online exhibit.

Two winners—a professional and an amateur—will be awarded prizes. Winners of the last contest received a month of unlimited free online access to the forum and chose from several prizes donated by Vivitar. Both chose the Vivitar 100-500mm zoom lens, which retails for about $800.

That's the same prize forum member Gary David, an executive vice president at Vivitar, presented at the White House Press Photographers' Association awards banquet earlier this year. "That puts us in pretty good company," says Forum Administrator Mike Wilmer. "That lens can be used with a mount for various cameras, so no matter which camera the winner owns, the lens is usable."

Photographers with the proper hardware and software can upload their digitized photos to Library 17. "Uploading is free," Wilmer explains. "And if you upload an entry, you have the advantage of knowing how your photograph will look as a digitized image." Or mail up to three prints, 8-by 10-inches or smaller, to The Photography Forum, P.O. Box 340009, Sacramento, CA 95834. The contest runs from Dec. 1, 1988 until Feb. 15, 1989.





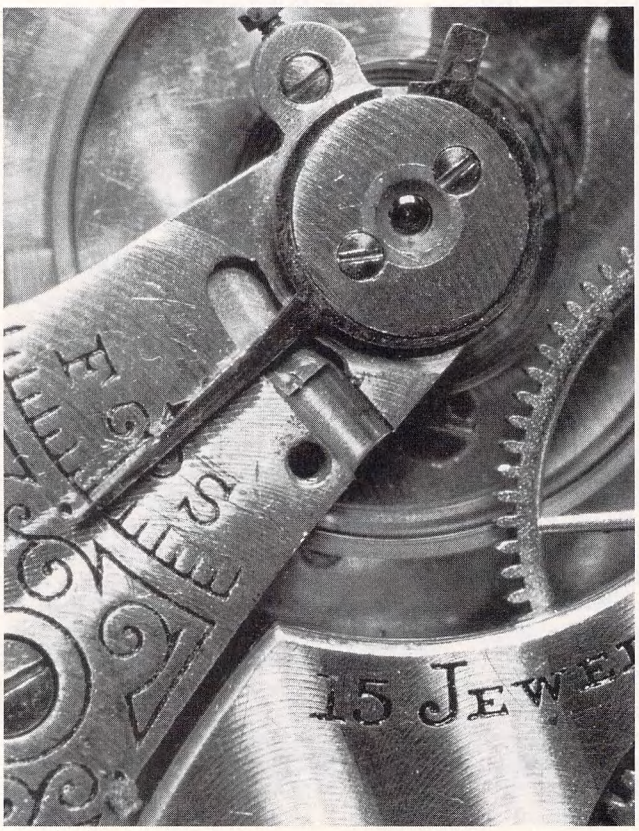
Bob Clemens: *His 'Women Whispering' took first place in the professional division. Clemens used a Hasselblad camera, a 150mm lens and T-Max 100 film.*

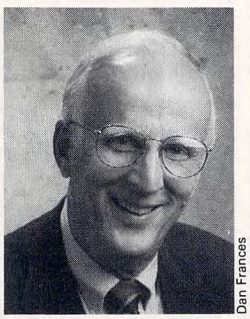
All mailed-in entries must be identified on the back with the entrant's name, amateur or professional status, CompuServe User ID number, phone number and address. Additional information on film speed and camera used would be appreciated, says Wilmer. Entrants must be CompuServe subscribers and at least 12 years old. CompuServe employees and their families, information providers and consultants are not allowed to participate. Photographs will not be returned.

Wilmer invites both black-and-white and color entries, but explains that online resolution is generally better in black and white. "We're getting a lot of good black-and-white prints," Wilmer says. "This is no doubt due to the renewed interest in that medium because of the introduction of Kodak's new black-and-white T-Max films."

Wilmer offers this advice for entrants: "The guidelines for images that convert well to GIF—CompuServe's Graphic Interchange Format for high-resolution graphic images—are similar to those for any good photograph. Proper exposure, good contrast and a sharp focus are essential. Bold patterns and simple images digitize better than those with more complex detail. A very tight closeup of a daisy, for example, is going to digitize better than a bouquet of flowers."

Wilmer, who is a professional photographer, and a group of qualified colleagues will sort through all mailed





Dan Frances

Dr. Bob Shoemaker: *His close-up of watch parts won first place in the amateur division. Shoemaker shot this with a Hasselblad, a 120 macro lens with extension and Pan-X film.*

entries. The best among them will be digitized and uploaded by Wilmer for display online. "These uploads will be placed in Library 6, along with all the entries uploaded by members with GIF capabilities," he says. "The photographs will then be judged by interested forum members until the contest ends in mid-February."

If you want to download the images placed in Library 6 (The Gallery), you'll need the proper hardware and software. "GIF is designed to overcome microcomputer incompatibility," says Wilmer. "It enables people with different types of hardware to transfer graphic images with relative ease."

Although GIF works with most computers, the best systems for graphics display are Atari ST, Commodore Amiga, IBM PC compatibles with EGA or VGA compatibility, and the Macintosh II. Depending on the hardware configuration, GIF can provide up to 256 colors and better-than-television resolution. Additional information on GIF and the hardware and software needed to product GIF imagery is available in the Photography Forum and in the Picture Support Forum (GO PICS).

The Photography Forum consists of much more than files of digitized images. The libraries are packed with information on cameras and equipment, darkroom techniques, marketing information, computer software for photography and files with advice for beginners.

Regular Sunday evening conferences, which run from 9 p.m. to 11 p.m. EST, feature a variety of speakers and topics of interest to both amateur and professional photographers. "Recently we've been discussing the new and exciting autofocus cameras from Nikon and Minolta," says Wilmer. "Representatives from both companies answer questions from members during our special Sunday conferences."

Wilmer invites anyone with an interest in photography to look into the Photography Forum. The forum has representatives from many companies, such as Kodak, Polaroid, Nikon, Minolta and Vivitar. "Writers for professional publications, as well as experienced professional photographers, are always willing to lend a helping hand. With this wealth of experience online, we're equipped to answer all types of questions about photography," Wilmer says.

Carole Houze Gerber is a contributing editor of Online Today. *Her CompuServe User ID number is 70007,1215.*

Need a Nudge? Check *The Electronic Gamer*

by Holly G. Miller

Computer gamer Sara Groves still recalls the time she was hopelessly stuck midway through solving the riddle of *Dark Crystal*. Frustrated, she convinced a friend to log onto CompuServe's Gamers' Forum (GO GAMERS) archives and check the menu option called "Game Hints." She wasn't looking for the solution, just a nudge in the right direction. Several nudges later, she was still in the dark. Her friend gave up, gave in and gave out the answer.

Since then, the Gamers' Forum archives have been upgraded to a comprehensive online magazine called *The Electronic Gamer* (GO TEG)—bigger and better than before, offering gaming guides, newsletter excerpts, chatty columns and nuts-and-bolts reviews. It is the complete, everything-you-ever-wanted-to-know-about-gaming kind of magazine.

But some things haven't changed: Sara Groves is still a frequent visitor. She may no longer need nudges, but, as an enthusiastic contributor, she enjoys tossing in a hint of her own from time to time.

"Now I read the reviews to see if a game sounds like something I'd like," she says. "After I'm finished with a game, I often read the 'walkthru' to learn someone else's strategy.

"Do I ever read a 'walkthru' *before* finishing a game?" she laughs. "I'll take the Fifth Amendment on that!"

Since computer gaming is an ever-evolving industry, *TEG* Editor-in-chief Patricia Fitzgibbons updates the magazine twice a month and is constantly adding new features to reflect innovations in the market. When conversation about cartridge games intensified in the Gamers' Forum last summer, she quickly responded in *TEG* with a section for cartridge game reviews.

"Because we have an electronic format, we can publish reviews much faster than print magazines can," says Fitzgibbons. "Somebody can submit material to me, I download it, edit it and get it online—all within a few weeks of a product's introduction."

Users generally move from the "Games Reviews" option on the menu to "Hints" and then to "Game Walkthrus." The reviews are the likely starting place because they provide an overview of a product. Written by avid, unbiased gamers, they are honest appraisals of what's hot and what's not. On the basis of these reviews, a game fan may choose to buy a product—a decision that could lead him to the "Hints" option for clues, and eventually to the 'walkthru' segment to see how other players arrived at the solution.

"We tell people first to give themselves a chance at the game," says Fitzgibbons. "For those who are really stuck, we've divided the 'walkthrus' into different parts so players don't just read the whole solution at once."

The online gaming areas—*TEG* and the Gamers' Forum—complement each other. If a player needs a nudge but doesn't want an entire solution revealed, he can ask for help via the Gamers' message board. Answers are posted within hours.

"Still, the hints and 'walkthrus' are excellent for those wee-hour struggles when you *must* have a certain clue to unlock a challenging game, and you can't wait for the rest of the world to wake up," says *TEG* booster Mary Kelly.

But *TEG* doesn't stop with reviews, hints and walkthrus. Other features include newsletters from industry heavyweights such as Electronic Arts, Infocom and SSI. These give readers pre-release reports on new games, bug fixes, interviews with designers, and announcements of contests and special events.

More reading is available in *Computer Play Online*, an electronic miniversion of *Computer Play* magazine, and Flagship's *PBM Gaming Guide*, an online guide to the expanding play-by-mail games hobby. *TEG*'s own *Gazette* is an outlet for articles, essays and interviews by online contributors, and the "Multi-Player Games Columns" option is full of chatty gossip about the *Island of Kesmai*, *MegaWars*, *SeaWAR*, *British Legends* and *You Guessed It!*

"In *TEG*, I like to have something for everybody who happens to be a gamer and who happens to be online," says Fitzgibbons. "We attract serious gamers and casual players, too. We have some people who may be interested only in looking at computer games. They stop by briefly, dabble a little, and then we may not see them for a while. We go all the way from the novice player to the real expert."

Holiday Gift Ideas for Harried Shoppers

Still haven't finished your holiday shopping? Don't despair! Many Mall merchants, offering a wide array of merchandise, are at your beck and call. Here are just a few offering gift-giving solutions guaranteed to arrive in time for the holidays:

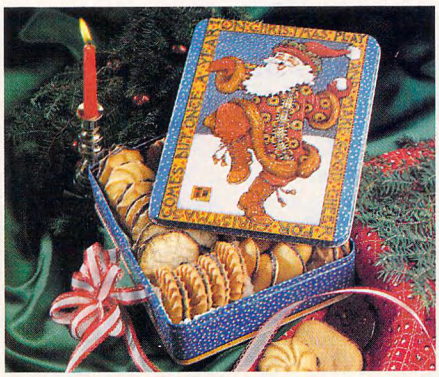
Rent Mother Nature

For a truly original gift, visit new Mall merchant Rent Mother Nature. Now you can rent a maple tree, lease a lobster trap, time-share a smokehouse or hire a honey hive. The recipient receives a handsome, personalized parchment lease document, periodic newsletters that give updates on the progress of the crop and a share in nature's bountiful harvest. Discover the ultimate in out-of-the-ordinary offerings. GO RM

Walter Knoll Florist

For more than three years, Walter Knoll has been offering CompuServe members a gathering of gifts, holiday greenery and FTD service. This year Walter Knoll recommends the FTD Brass 'n' Blooms Bouquet, a brass container featuring an arrangement of red mini-carnations and white pomps sprinkled through a bed of Christmas greens, topped with a red candle and a velvet bow. Other holiday suggestions include the FTD Holiday Cheer Bouquet, the Christmas Coupe Bouquet and the Florentine Basket Bouquet.

Walter Knoll will arrange for delivery to 135 countries around the world. To say "Season's greetings" with flowers, GO WK.



Pepperidge Farm

Browse Pepperidge Farm's online cornucopia of cookies, soups and gourmet gifts. Especially recommended is the Believe Cookie Tin, a joyous harbinger of the yuletide season packed with all of Santa's favorite cookies. Also featured are a fruitcake with brandy and Grand Marnier, Christmas plum pudding with brandied hard sauce and *Pfeffernuese*, an old-fashioned Christmas cookie sure to become a holiday classic in your home. Surprise family and friends with any of these delectable delights. And don't forget to leave some milk and cookies for old St. Nick! GO PF

Florida Fruit Shippers

Another long-time Mall merchant, Florida Fruit Shippers, offers a tasty selection of gift-giving solutions. Select a one-quarter, one-half or full bushel of fresh Florida oranges or grapefruits. Also consider the Champagne Hamper, the Tropical Luau or the Balloon Pack. For children, choose the old-fashioned Christmas stocking. Or splurge on Florida lobster tails or stone crab claws. Everything is shipped by UPS and is guaranteed to arrive bursting with flavor.

Florida Fruit Shippers ships almost anywhere in the United States, including Puerto Rico, the Virgin Islands and Hawaii. A special Europak is available for far-flung family and friends. Prices listed include all shipping and handling charges. To spread some sunshine this holiday season, GO FFS.

Santa Claus Is Coming

Speaking of Old St. Nick, don't forget that Santa and his elves will be appearing *live* in The Mall on Saturday, Dec. 3, and Saturday, Dec. 10. Bring the family and join in the online fun. For details, visit Holiday Bazaar '88. GO HOL

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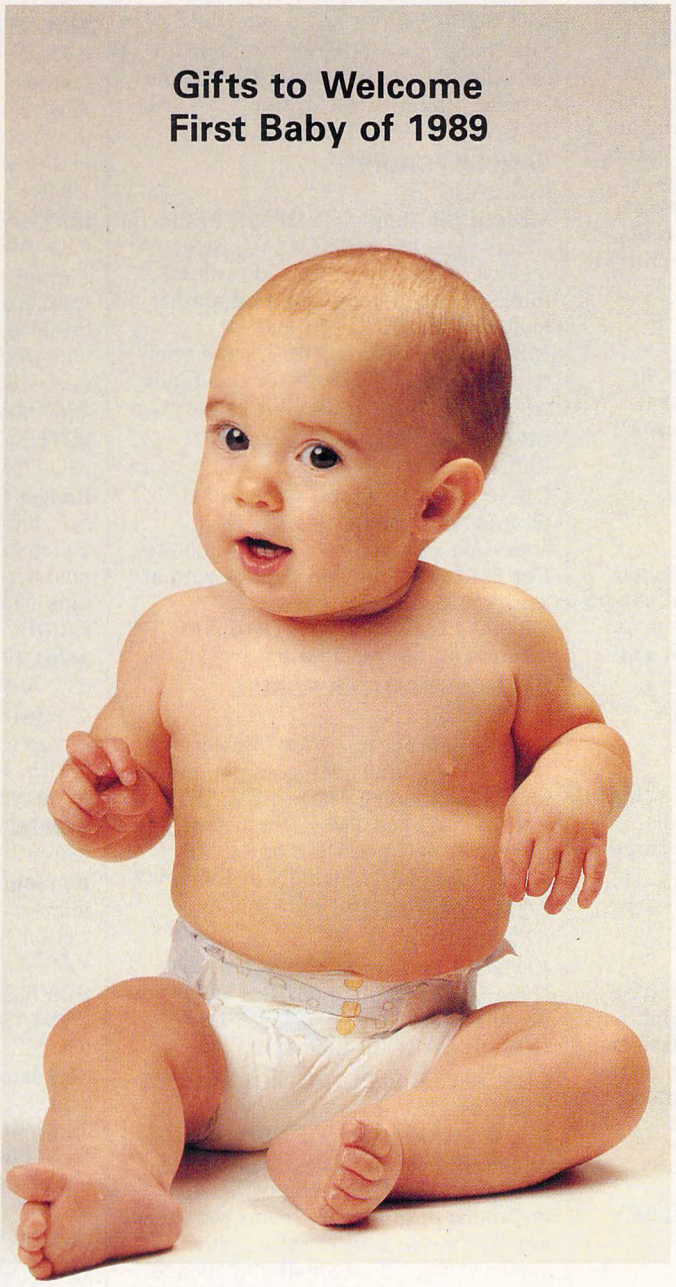
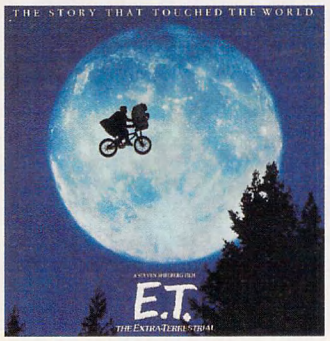
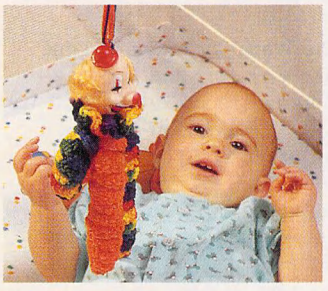
Gifts to Welcome First Baby of 1989



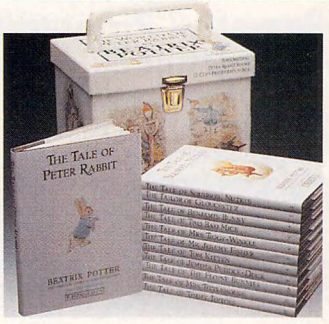


E.T. *video*



Hand-crocheted clown

Handcrafted country clock



The Story of Peter Rabbit

The Elephant's Child, Pecos Bill

Fresh fruit basket

Coffee sampler

Announcing The Mall's second annual "First Baby Contest." To welcome the first child born in 1989 to a CompuServe member, The Mall has compiled a bonanza of gifts donated by Mall merchants and sure to please the proud parents. Among the items in the Welcome Baby Basket are:

- A one-year membership and a $50 gift certificate from Shoppers Advantage.
- An *E.T.* video from Magic Castle Video.
- A handcrafted country clock from Williams & Eeden Garden Center.
- A Tyler child's cup from The Metropolitan Museum of Art.
- A hand-crocheted crib clown from Some Things Special.
- A wreath for baby's room from Walter Knoll Florist.
- A selection of children's books from Penguin Books.
- Three children's selections on compact disc, album or cassette, including *The Elephant's Child*, *Pecos Bill* and *The Story of Peter Rabbit*, from Windham Hill.
- A one-quarter bushel deluxe assortment of grove fresh oranges, ruby red grapefruits, orange blossom honey, tropical jams, Georgia pecans and tropical candies, from Florida Fruit Shippers.
- A coffee sampler to keep mom and dad awake during those midnight feedings, from Coffee Emporium
- And baby's first computer, compliments of Paradise Technology.

For a complete list of prizes and rules and regulations on how to enter, visit The Mall. GO MALL.

Powerful Programs and Print Utilities Online

The libraries in CompuServe's forums are filled with thousands of programs and textfiles. The following are a few of the files uploaded to the libraries in recent months. For a more up-to-date list, check the weekly "Uploads" columns in *Online Today Daily Edition* by typing GO OLT-3700 at any prompt.

ADOBE FORUM
(GO ADOBE)

Print to PostScript—POST.COM, a utility for MS-DOS computers that enables direct printing to PostScript printers. Files POST.COM and POST.DOC in Library 4.

AI EXPERT FORUM
(GO AIE-100)

Hypertext System—CogentTEXT, a shareware hypertext system that can be used as a stand-alone with your favorite text editor or with PROLOG. For IBM PCs and compatibles. File COGTEX.ARC in Library 3.

AMIGA ARTS FORUM
(GO AMIGAARTS)

MIDI Tutorial—This tutorial on MIDI, a sound system for the Amiga, discusses the MIDI in/out/through jacks, MIDI channels and more. File MIDIBA.ARC in Library 8.

ASHTON-TATE FORUM
(GO ASHFORUM)

DBase Tracker—A complete database program to help you track the functions and procedures available for dBase and dBase compilers. Includes a 406-record .DBF file list that can be expanded. File FUNCT.ARC in Library 2.

ATARI ARTS FORUM
(GO ATARIARTS)

Adventure Game—*Hero,* a full-color, animated adventure game. File HERO.ARC in Library 1.

ATARI 8-BIT FORUM
(GO ATARI8)

Database Program—DiskBase, a database program for the Atari enables you to print records and files selectively, read data from ASCII files, copy records or the data structure, and sort files. Files DSKBSE.OBJ and DSKBSE.DOC (documentation) in Library 5.

AUTODESK FORUM
(GO AUTODESK)

Capital Idea—A program to automatically turn on uppercase letters. File CAPSON.COM in Library 9.

BORLAND APPLICATION FORUM
(GO BORAPP)

File Dumper—A program to dump all Sidekick Plus time planner files to the screen, printer or a file. File PLUSPL.ARC in Library 2.

CANCER FORUM
(GO CANCER)

Medical Bill Help—MEDPAID prints sheets for a log book for recording medical bills, payments and insurance filings. Files of compiled programs include MEDPD1.EXE and MEDPD2.BAS for IBM PCs and compatibles, MEDPD1.BAS for the Tandy color computer. Located in Library 2.

CB FORUM
(GO CBFORUM)

CB Terminal Program—A terminal program designed especially for accessing CompuServe's CB Simulator. For IBM PCs and compatibles with at least 256K memory. Files CBTEXE.ARC and CBTDOC.ARC (documentation) in Library 1.

COLOR COMPUTER FORUM
(GO COCO)

Graphics Displayer—View Master, an ML package to display common graphics files, including MGE, MAC, ST, TNY, DS-69 and PMODE. Instantly translates between RGB and CMP video. File MASTER.BIN in Library 2.

COMPUTER CLUB
(GO CLUB)

Keyboard Emulator—IBMKEYS enables you to emulate an IBM PC keyboard on the Sanyo 550/555. File IBMKEY.ARC in Library 2.

CONSUMER ELECTRONICS FORUM
(GO CEFORUM)

Visual Verification—An article explaining how to use a video camcorder to take pictures of your belongings for insurance purposes. Explains the items you will need, how to set up your camcorder to shoot small objects and how to use audio. File CAMINS.ART in Library 2.

EDUCATION FORUM
(GO EDFORUM)

Home Schooling—An edited transcript of a conference on home schooling with Kit Finn and Pat Farenga, who write for the magazine *Growing Without Schools*. File HOMSCH.CO in Library 6.

GREAT OUTDOORS FORUM
(GO OUTDOORFORUM)

Fishing Tips—Tips from professional bass fishermen. Topics cover a wide range of specific techniques and tackle for bass fishing. Files PROTIP.1 and PROTIP.2 in Library 5.

IBM NEW USERS FORUM
(GO IBMNEW)

Outdoor Adventure—*Wilderness Survival*, a menu-driven outdoor adventure in which you are lost in Rugglestone National Park and must overcome obstacles. File WS161.ARC in Library 3.

IBM HARDWARE FORUM
(GO IBMHW)

Format Utility—FormatMaster, shareware from New-Ware, a menu-driven diskette format utility. Handles 5.25-inch or 3.5-inch single-or dual-density drives. User configurable. File FMTMAS.ARC in Library 1.

LOTUS INTEGRATED FORUM
(GO LOTUSA)

Budget Planner—A family budget package that includes two 1-2-3 WK1 files, which help set up a family budget (annual and monthly) and pay monthly bills. Documentation included. File FAMBGT.ARC in Library 11.

MAUG HYPERFORUM
(GO APPHYPER)

Conquer the World—*Empire*, a game for up to three players and the Macintosh. Requires HyperCard version 1.2 or above. File EMPIRE in Library 2.

SCIENCE AND MATH FORUM
(GO SCIENCE)

Random Numbers—RGEN, a random number and date generator that will run on IBM PCs or true compatibles. File RGEN.ARC in Library 8.

SCIENCE FICTION AND FANTASY FORUM
(GO SCI-FI)

Simulator—A new version of BEGIN, an MS-DOS implementation of a "Star Trek" starship simulation that departs from the normal sectored galaxy. Graphics system not required. File BEGIN.ARC in Library 2.

TANDY PROFESSIONAL FORUM
(GO TRS80PRO)

PCPool—An MS-DOS CGA graphics game that lets you compete with Minnesota Fats. File PCPOOL.ARC in Library 6.

TEXAS INSTRUMENTS FORUM
(GO TIFORUM)

Australian Programs—A collection of programs, games and utilities in BASIC, XB and Multiplan from the Hunter Valley Users Group in Australia. For the TI 99. File HV99.BRC in Library 1.

David Peyton co-authored How to Get the Most Out of CompuServe *and* Advanced CompuServe for IBM PC Power Users. *His CompuServe User ID number is 76703,244.*

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Fresh powder and good company bring these vacationers together: *Colorado's Keystone Mountain*

Conquer Colorado's Slopes

From Aspen to Vail, Ski Resorts Provide Rocky Mountain High

by Pat Pugh

Imagine a winter vacation that combines the clear air of the Rockies with European shopping, a moonlit sleigh ride with a spectacular seafood dinner in a charming mountainside chalet. You can do all these things and more without even setting boot to binding. Ah, but then you'd miss the point of the winter experience, Colorado-style.

It is remarkably easy to shuttle from Anywhere, USA, to Denver, gateway to the snow country. From November through April, major airlines offer several flights a day to Denver's Stapleton Airport, with Continental Express Airlines operating dozens of direct-connect flights to the ski resort towns of Aspen and Vail.

The triple-mountain complex of Keystone, lying 70 miles west of Denver, is easily reached by rental car with no mountain passes to cross, or by the Resort Express bus directly from the airport. For flight information, check online in the Official Airline Guide (GO OAG), Eaasy Sabre (GO SABRE) or Travelshopper (GO PARS). From points east or west, it is possible to be skiing by lunchtime the same day you leave home.

Thanksgiving traditionally signals the start of the skiing season, but many knowledgeable skiers prefer to head for Colorado between Jan. 15 and April 15, well after the holiday rush. Snow conditions are better, temperatures are warmer and long sunny days are the norm. Avoiding peak times also means shorter lift lines and more attractive travel packages.

Ski with Goofy

Vail/BeaverCreek, the sky-high multi-mountain resort complex that lies in a pocket of peaks in central Colorado, is the premier playground for international celebrities. European-styled Vail, consisting of the East and West Villages, offers browsing among elegant shops, indoor skating and early morning ballooning in the frosted valley. Great eateries and lodging options abound. It is a glittering St. Moritz or a miniature Zermatt, situated along Interstate 70, west of Denver.

In contrast, BeaverCreek is attuned to families, but with a measure of exclusivity because of its small collection of luxury hotels and condominiums. Children discover a fantasyland-in-the-snow: their own specially built learning terrain with teepees, forts and caves, and Walt Disney characters on skis.

BeaverCreek's sculpted powder slopes and posh digs attract many skiers—with good reason, it is a tucked-away mountain paradise with top-flight skiing. Shops and the lift complex are but a stroll away.

Together, Vail/BeaverCreek boast 150 ski runs serviced by 30 uphill lifts, including the exciting new China Bowl expansion (adjacent to Vail's backpowder bowls), which more than doubles the skiable terrain. With the addition of the Cascade Village super-quad chairlift behind the Westin Hotel, getting uphill to the popular Simba trail is a snap.

This charming full-service hotel (ski rentals on the premises) has two restaurants, an outdoor hot tub and heated pool, and is situated beside a mountain stream. Adjacent to the Westin is the modern multisport Cascade Club facility with indoor tennis and a 275-seat theater.

For regal amenities in the heart of the village, consider booking into The Lodge at Vail. Its excellent restaurant, the Wildflower, is presided over by chef Jim Cohen, whose ravishing risotto is reason enough to visit. The Lodge is Vail's first and foremost European hotel, with many extras, including rooms with wood paneling, marble bathrooms and 24-hour room service.

The preferred pillow at BeaverCreek is the elegant Poste Montane, with its spacious suites (some with fireplaces) situated steps from shops and the base lifts. Guests can expect the ambiance, service and intimacy of a small European hotel. Rates include continental breakfast and daily maid service.

The Centennial condominium lies immediately beyond the Poste Montane. The highrise offers fashionable living with built in humidifiers, large, fully equipped kitchens, washers and dryers, and underground garage parking.

Want *la dolce* skiing and gourmet meals? Beano's Cabin, reached by ski or complimentary snowcat, is near the runout of BeaverCreek's intermediate Larkspur Bowl trail. The rustic structure is a popular addition to the area's slopeside restaurants, serving California-style entrees, pastas and salads. In the evening, access is via sleigh.

A group can reserve Trapper's Cabin, a new four-bedroom, rustic log hideway set in the hillside above BeaverCreek. A caretaker-chef prepares extraordinary dishes while you sip and soak in a hot tub. The next morning, a short excursion from the cabin, via cross-country skis, provides an eagle's-eye view of the splendid Gore Range peaks of Wyoming.

If you're tired of the champagne treatment and yearn for the real West, that's here, too. Locals stoke up on burgers and baby back ribs at Hole in the Wall (in Avon) or at the friendly Gashouse, four miles west of the ski area in the tiny town of Edwards, Colo. Patrons at both places dress casually.

From Jan. 29 to Feb. 12, Vail Valley will be the site of the 1989 World Alpine Ski Championships, a biennial gathering of the world's premier amateur ski racers. The last time the spectacular event was held in the United States was in 1950 at Aspen.

Cornucopia of Ski Pleasures

Skiers have had a love affair with Keystone since its first chairlift swung around the bullwheel 16 years ago. Like the Emerald City of Oz, with twice as many surprises, the four-season resort encompasses three mountains and sports its own ice rink on a natural lake. Luxurious condos dot the area and a shopping mall is anchored by a multistory hotel. Keystone has an indoor tennis and health facility and several pools. Additional activities include night skiing, cross-country skiing to a ghost town, dinner sleigh rides, and a thrilling "lift" via gondola for a panoramic view of the majestic snow-capped Continental Divide.

For the most part, ski terrain on Keystone Mountain is intermediate; challenges are on adjacent North Peak and at Arapahoe Basin, 15 minutes away by free shuttle bus. A multiday Ski-the-Summit lift pass is interchangeable for skiing Keystone's three mountains, Copper Mountain and Breckenridge.

With 30 restaurants, Keystone's dining ranges from fancy to no-frills burgers and beer. Of note is the Bighorn Steakhouse for delectable aged beef. The Ranch offers an elegant log structure situated on the area's golf course. And don't miss an evening at Ski Tip Lodge, an old stagecoach stop. At Ski Tip during the 1950s, Colorado's first organized skiing was born.

No Snow Job

The sister resorts of Aspen/Snowmass have always drawn social heavyweights, show-biz people and the internationally illustrious. Snow conditions are top-notch, and Aspen's activities are so varied that there's no chance to cover it all in a week's stay.

Aspen/Snowmass is big. You have entered the magic world of North America's largest Alpine ski complex and the nation's most extensive cross-country trail system. The 11,000-foot peaks that loom above the Roaring Fork Valley offer every kind of skiing, from steep alpine trails to the gentlest of beginner slopes. Along with Buttermilk and Aspen Highlands, the four resorts include thousands of acres of runs and more than 40 ski lifts.

The Aspen/Snowmass ski school is legendary, and is said to be the best in Colorado, with a tradition reaching back to the 1940s. The 250 multilingual instructors can teach anyone to ski better.

In choosing where to stay, you have to decide first between Aspen or Snowmass, even though 12 miles and a free shuttle connect them. Snowmass is more intimate, with condominiums and lodges that run up the sides of the slopes. Almost everything has ski-in, ski-out access. Snowmass is more family oriented with intermediate terrain exceeding the difficult. A run down the wide-open swath of the famous Big Burn trail may clinch a decision for Snowmass.

Aspen is for the heartier skier, who prefers tougher terrain and non-stop nightlife. From Aspen's Main Street, Ajax Mountain appears more frightening than it really is, though a handful of starchy, thrill-a-minute runs are channeled over its 3,370-foot vertical.

After skiing, you'll find plentiful diversions at both resorts: skating, snowmobiling, cross-country skiing, dog-sledding, hot-air ballooning, art galleries, theater, indoor tennis and squash, swimming and, of course, the sylvan setting of the Rockies.

The Gant Hotel is revered in Aspen for comfort and its access to swimming pools and hot tubs. Spacious suites include fireplaces and almost every housekeeping item, including corn poppers and toasters. Centrally located Independence Square Hotel is a great place to relax, so is the more economical Brass Bed Inn on East Durant Street. Rooms, while not posh, are comfortable; the outside jacuzzi pool is enormous. A home-cooked breakfast comes with the price of a night's stay.

The Snowmass Club Lodge-Villas is a unique haven in lower Snowmass, featuring a full-service athletic club with lap pool, tennis and racquetball, and touring trails beginning at the doorstep. Rooms are warmly furnished with every amenity. There is a "private club" feel, with a fine restaurant and grill, piano bar and concierge.

The Ridge and Woodrun V are unparalled in Snowmass for mountain condominium luxury. For reservations at these and other condominium units with superlative views, contact the Coates, Reid & Waldron Management Company. Situated steps from the village mall shops and ski lifts, the sparkling Hotel Wildwood boasts the delightful Pippin's restaurant. The newly renovated hotel has a hot pool and complimentary transportation within the area.

Together, Aspen/Snowmass contain the best assortment of high-altitude restaurants and cafes in North America. In Snowmass, lunch on-mountain at Gwyn's High Alpine or Krabloonik's at the base of Campground lift. The ranch-style restaurant specializes in exotic western fare and is home to more than 200 huskies, the beautiful dogs that pull vacationers on sleds through the woods. Mezzaluna is Aspen's hottest Italian spot; locals hang-out at the Hotel Jerome bar.

Heading Out

Whether you're heading for the slopes at Aspen/Snowmass, Keystone or Vail/BeaverCreek, CompuServe can help get your trip in order. From airline to hotel to car rental reservations, there are online services to meet your needs, and help you indulge in Colorado's winter experience. GO TRAVEL

Formerly special sections editor for the Houston Chronicle *and columnist for the* Omaha World Herald, *Pat Pugh is a free-lance travel writer based in Houston, Texas.*

Holiday Travelers Turn to Travelshopper

By Kathy Baird

The holidays are prime time for travel, and those who live orderly lives make their travel plans far in advance. But who's to say an unexpected turn of events might not abruptly dismantle those plans and leave you stranded when you most want to be with family? And who's to say we all live orderly lives?

Those left in the lurch and procrastinators alike can take heart, however, if they are CompuServe subscribers. Despite last-minute changes in holiday travel plans, Travelshopper (GO PARS) may still help them reach their families in time for holiday celebration.

Let's say, for example, that the Brown family in Boston receives a call from relatives in St. Louis announcing that they must cancel a scheduled Christmas trip to Boston because of a work conflict. The Browns immediately turn to Travelshopper to see if they can book airline reservations to St. Louis instead.

Jim and Martha Brown and their two teen-age children gather around the computer screen to check flight availabilities. They decide they would like to leave Boston on Friday, Dec. 23, and return on Tuesday, Dec. 27.

Ideally, they would leave Boston on TWA Flight 753, which departs at 4 p.m. and arrives in St. Louis at 5:48 p.m. That flight is already booked, as are the direct TWA flights scheduled for 12:35 p.m. and 9:13 a.m. However, four seats are still available on the 6:35 a.m. flight. After a brief discussion, they electronically book those seats.

Now the Browns search for a return flight on Dec. 27. They decide that the ideal schedule would place them on TWA flight 150, which leaves St. Louis at 5:36 p.m. and arrives in Boston at 9:10 p.m. Again, their chosen flight is full. After reviewing several other options, they settle for an 8:37 p.m. departure, which should place them back in Boston at 12:13 a.m.

Next, the Browns decide they will need a rental car during their stay in St. Louis. They check car rental information under Option 6 on the main Travelshopper menu.

After comparing rates for the 12 rental car companies listed, they determine that Snappy Rental Cars has the lowest rate: $26 per day and 20 cents per mile. Unfortunately, a request for a Snappy rental car brings the news that all cars are already reserved for the holiday weekend. After trying several other less expensive options, they are able to reserve a National rental car at the rate of $44 per day and 31 cents per mile.

King Associates

Although the Browns plan to stay with relatives in their hometown of St. Louis, they note that hotel information is also available on Travelshopper. In case too many other Browns are home for the holidays, they decide they will return to Travelshopper later to book hotel reservations. If that becomes necessary, they will choose a hotel with a room rate in price range 2—$51 to $75 per night. They decide to settle upon other amenities—such as sauna, television and free parking—later, if needed.

After completing their holiday travel plans, the Browns call their relatives in St. Louis to announce their plans. Only one hour has elapsed since the first phone call.

The Brown family can relax now, secure in the knowledge that their boarding passes and rental car will be waiting for them on Dec. 23, as will the rest of the family in St. Louis.

Who's Behind ABC?

by Paul Newkirk

For CompuServe members, looking for a hotel is as easy as a-b-c—that is, the online ABC Worldwide Hotel Guide (GO ABC). But the guide offers more than ease and efficiency when searching for a hotel. It offers the backing of ABC International, a well-known and respected European information provider for more than 125 years.

"Our first publication in 1863 was an alphabetical list of rail schedules within the United Kingdom," says Richard Walsh, ABC's director of information services for the Americas. "In fact, if you were to walk into a European airport or train station today to ask about schedules in other cities, the station attendant would probably pull out the ABC guide to answer your inquiries." ABC guides are so well known in Britain that Agatha Christie based the plot of one of her mysteries, *The ABC Murders*, on the company's publication of train schedules.

The English roots of ABC International are in Reed International, a $3.5 billion British publishing company. "ABC is the division of Reed that specializes in travel information," says Walsh. "Our travel publications cover almost every spectrum you can think of. We have a publication called *The World Airways Guide* that has 750 airlines' schedules as well as codes for cities, airlines' minimum connect times and daylight-saving zones around the world. And we have directories for the European market for tour packages, immigration, and visa and medical

requirements for different countries."

This worldwide travel expertise is brought to the online ABC Hotel Guide, which provides up-to-date comprehensive listings of more than 28,000 hotel properties worldwide. Information on each hotel includes street address, location (such as downtown or at the airport), local and toll-free telephone numbers, telex, number of rooms, rate guidelines (in US dollars), facilities, business services and credit cards accepted.

Approximately 7,000 of the hotel listings include descriptive texts of the facility. These texts are offered only online. "They are one of the most appealing and useful parts of the online hotel guide," says Walsh. "These texts are not written according to a formula set up by the publisher. They are provided by the hotels themselves, and we do very little editing."

With these comprehensive and simple search methods, it is easy to find a hotel that suits your most idiosyncratic need. Say you're planning a trip to Boston, and you may have no idea what is available for overnight accommodations in the city. Thanks to ABC, you are still in command of the market.

By following the simple ABC menus, you can search by country, state or city to find what is available in the target area. If your company has a discount with a particular hotel chain, you can narrow the search further by that name, or by price if that is the more important factor. From there, you can explore a list of 26 items describing the hotel's location and amenities (some of which are "at airport," "at beach," "conference center" and "golf").

If, for instance, you are taking your department to Boston for a business conference, this geographical search will narrow the field to 221 hotels (by selecting United States, entering MA and then Boston). From such a large field, you can afford to be picky. You may choose to continue screening using Option 6, "Conf. Center," which narrows your options to 29 hotels. If ambiance is important (Do you want your employees to be well fed? in shape? just comfortable?), you can glance over the subsequent individual descriptions of each of the 29 hotels. Perhaps the phrases "small, turn-of-the-century hotel, with fireplaces" and "warmth and character of a family inn" help you make the final decision as to which accommodation is truly accommodating. If so, your search is complete—call the Lennox Hotel in Boston. The Lennox, like many hotels, lists a toll-free reservations number.

Whether you're looking for a large hotel that is part of a major chain, a cozy, historic inn facing the sea, or a converted manor house in Europe, ABC listings on CompuServe can help you find the hotel that suits your particular style, budget and needs. And you'll be secure in knowing that behind the offered information is the reputation of an established, European travel institution.

Paul Newkirk is a free-lance writer based in Columbus, Ohio. His CompuServe User ID number is 70000,1036.

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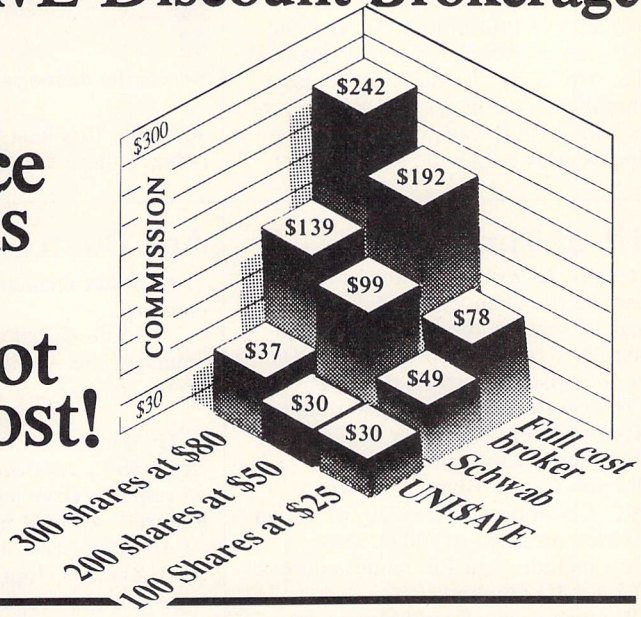

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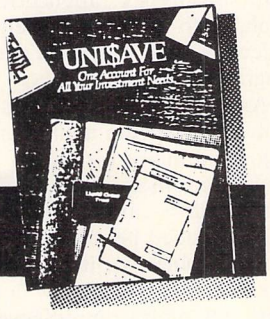

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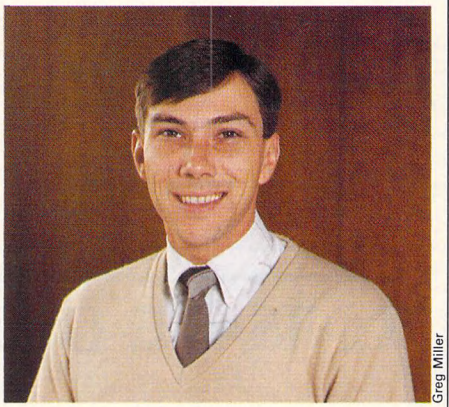
Rep of the Month

Daniel Sutherland, a Customer Service representative Monday through Friday, 4 p.m. to 1 a.m., likes his role. "I use my communication skills to represent one group's ideas to another. It is personally satisfying to bring two groups together in this way," Daniel says. Working evening hours accommodates his school schedule as he pursues a business marketing degree at Franklin University in Columbus, Ohio.

Daniel's main interests on the CompuServe Information Service are the communication, news and financial areas. He says, "I would like to assure CompuServe members that their interests and our interests are the same—being online and having successful sessions. It is best to work together to achieve these common goals."



Greg Miller

Successful online sessions: *Sutherland*

Gift of Time

Online Today offers CompuServe members the chance to win 10 hours of standard service connect time (a $60 value) by writing a 200-word essay on how they use the Information Service.

The essay should be typed double-spaced and sent to *Online Today,* CompuServe Incorporated, 5000 Arlington Centre Blvd., P.O. Box 20212, Columbus, OH 43220, or via an EasyPlex message to 70003,3246. Please include your full name, address and User ID number.

Winning essays are published in *Online Today.*

Find Fast Assistance Online

I regularly check into the Professional and Programmer Forums to find programs uploaded to the forum libraries. There are many useful utility, game, business or application programs available to meet most needs. I have collected many freeware and shareware programs.

As a programmer, I get assistance from fellow forum members in solving major and minor problems. They often offer solutions that hardware and software vendors cannot.

If you need help with a computer-related problem or if you want to express an idea with fellow computer users, log onto CompuServe.

Wayne Dockery
Mt. Vernon, N.Y.

Ask Customer Service

Q: What terminal type does PC3 emulate?

A: Professional Connection version 3 emulates the ANSI/VT100 terminal type.

Q: When I try to log on, the screen clears and a message says, "I am getting no response from your modem, Log-on Failure!" What is wrong?

A: One of two things can be wrong. First, make certain that PC3 is set up to address the correct communications port or *comport.* PC3 will support comports 1 and 2.

Second, check to make sure that PC3's "modem initialization sequence," ATZ, is recognized by your modem. Many Hayes-compatible modems, especially internal modems, recognize slightly different initialization sequences, whereas the remainder of the modem command structure remains the same. The modem's manual is the best source of information about modem-recognized commands.

Once the proper values for modem commands are determined, press F8 when the cursor is on the Modem Type option of the Terminal Setup menu. A Modem Parameters menu is displayed listing the current values. ATZ^M is displayed as the initialization sequence. Enter the initialization sequence that your modem uses over this value. Remember to save the new values before exiting this area by selecting S(ave) from the menu options after pressing F9 to exit.

Q: When I request to view a GIF picture online, I get a message that says, "Your terminal does not appear to support these types of graphics." Can I view all of the graphics available on CompuServe using PC3?

A: PC3 supports all CompuServe graphics formats.

Type GO TERMINAL and select Option 2, "Change Your Permanent Settings." From the next menu, select Option 5, "Transfer Protocol/Graphic Support." Indicate Yes on the three graphics options. Next, press the Return key to return to the previous menu and select Option 4, "Terminal Type/Parameters." Select Option 1 and set your terminal type to VIDTEX/PC3. Make the changes permanent before logging off or they will default to the original settings.

Q: When I request an online display of a GIF file, the screen clears and the message "Transmission Error, Exiting GIF" or "Bad Version ID Encountered, Exiting GIF" appears. Why?

A: When either message is received during an online GIF display, PC3 has encountered a sufficient level of line noise to render the selected GIF file useless. During these times, you can download the file and display it offline or log off, reduce your baud rate and log on to view it online at a slower speed.

Q: I am using a printer capable of graphics printing, but when I try to print a graphics image, "garbage" appears on my printer. Why is this?

A: If your system is using a graphics capability above the CGA level, you need to use the file GRAFPLUS on the PC3 disk to display the image correctly. Simply follow the instructions for installing GRAFPLUS, contained in GRAFPLUS.DOC on your PC3 application diskette (5.25-inch) format, or on the PC3 installation diskette (3.5-inch) format.

If your system is capable of CGA only, you need to run the DOS file GRAPHICS.COM prior to running PC3 to allow for graphics printing.

Note: If you have an IBM Monochrome Adapter (MGA) or its equivalent, you will not be able to view or print online graphics images.

Q: After I set the comport setting to 2 and try to log on, PC3 responds, "I am unable to speak to your modem, Log-on Failure!" After rechecking my settings, I find that the comport has reset to comport 1. Why?

A: When you enter a new comport

setting, PC3 interrogates the specified comport to determine whether it is a valid serial port. If for any reason PC3's inquiry is negative, the comport setting on PC3 defaults to the original setting.

The reverse is true if, for instance, you have an internal modem setup for comport 2 and no other available comports are on your system.

To correct this situation, make certain that the jumpers and any DIP switches are set correctly so that the card slot is initialized as a "serial port."

Q: I have a Tandy 2000 system. After purchasing PC3, I was advised by CompuServe's Customer Service staff that PC3 does not support the Tandy 2000. What can I do?

A: If you have a version of PC3 that has a release date of September or November 1987, you will need to upgrade to the latest version as soon as it is available. Periodically check "What's New" online for an announcement regarding the newest release. The version date is displayed when you start PC3, prior to the main menu.

Q: I tried to build a customized menu on PC3 and was advised, ".CHOICE 9, CHOICE 24: number too large." What does this message mean?

A: The message indicates that the line and option in the file MAIN.TXT are incorrect. Until this error condition is corrected, PC3 will be unable to compile the new menu.

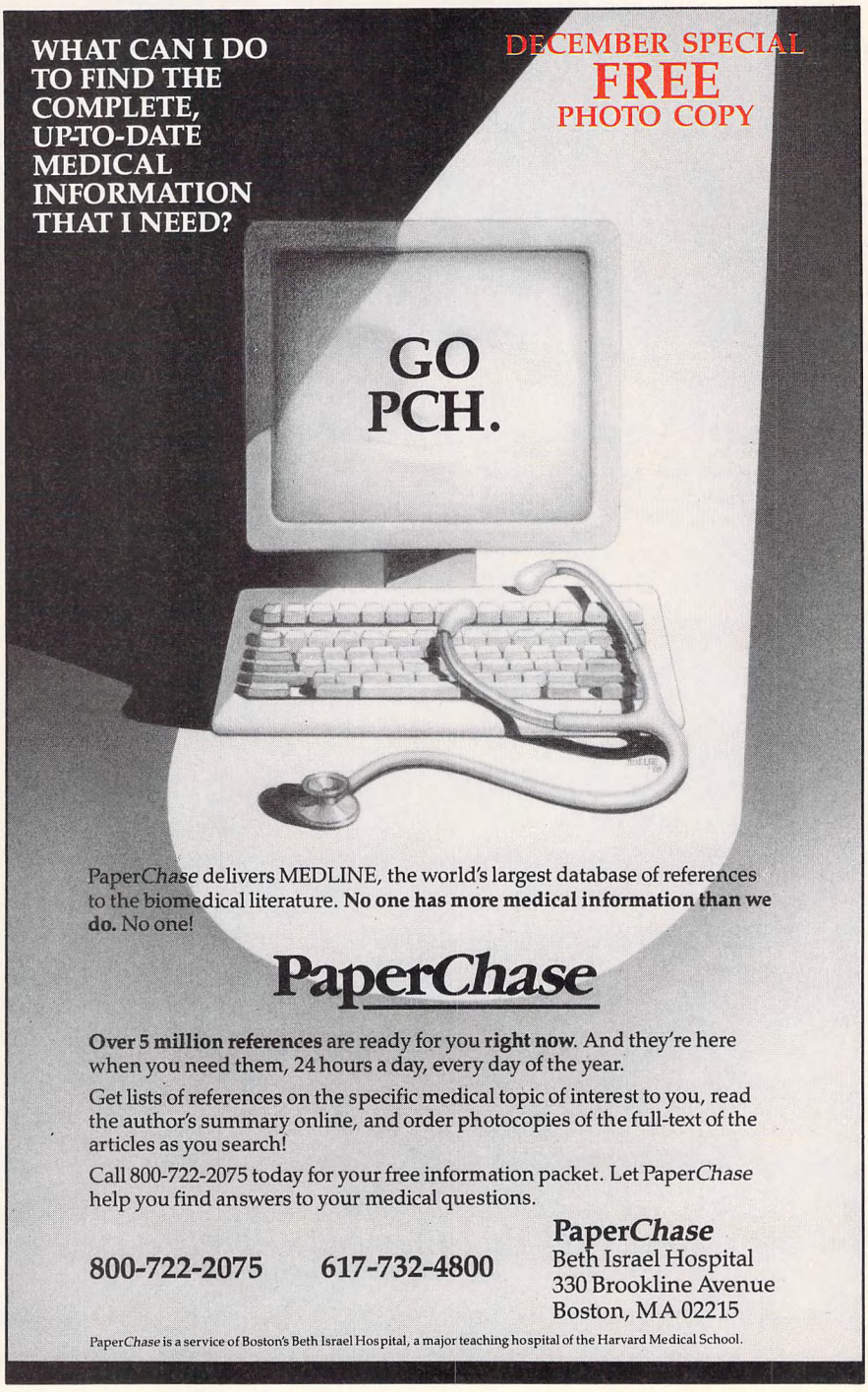
Q: After I have been online for a few minutes, a message saying, "Log-on Timeout," displays and I am taken back to the PC3 main menu. Why?

A: When PC3 runs an automatic log-on routine, it expects to receive either an OK or ! prompt at the end of the log-on routine. Upon seeing this prompt, PC3 switches into the Online mode. If for any reason, PC3 does see either prompt, it aborts the log-on routine within several minutes. Also check the online terminal settings area (GO TERMINAL). Option 10, "Terminal Type/Parameters," lists the Micro Inquiry Sequence. This function should be on, as PC3 uses this inquiry to verify that it is online in the absence of either of the above prompts.

Q: When I am using the mouse on my IBM PC, PC3 will not run properly and often freezes. Why?

A: When running PC3 simultaneously with a program that supports any "serial" device, such as a mouse or printer, the serial-driven device attempts to address the same comport it is using. Conflicting instructions can be sent advising the mouse to perform one function while PC3 interprets the same command to mean something different or unrecognizable. As a result, PC3 and the mouse program fight for control and each program freezes until one of them relinquishes control of the comport. As you are operating in the DOS Window mode, you can use mouse functions without interfering with PC3 operations.

If you have a question for Customer Service, type GO FEEDBACK at any system prompt or call 1-800-848-8990.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Earth Science	Public Affairs
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Education	Religion
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To access SmartSCAN, type GO IQUEST at any prompt.

*The $9 SmartSCAN charge is waived. Connect-time charges and Search charges for items chosen and displayed from the SmartSCAN results menu remain in effect.

Avatex 1200p Pocket-Sized Modem:

Good for Laptop Computers

Elec & Eltek (USA) Corp.
1230 Oakmead Pkwy., #310
Sunnyvale, CA 94086
408/732-1181

Computers: Modem works with any standard RS-232C serial port; bundled software requires IBM PC, PC-XT, PC-AT, PS/2 or compatible computer.
Operating Systems: Software requires PC-DOS or MS-DOS version 2.0 or later.
Media: Software supplied on one 5.25-inch diskette.
Copy Protection: None.
Systems used for test: (1) 2MB AST Premium/286 computer with 80287 math coprocessor, Genoa SuperEGA HiRes Video Adapter, Sony Multiscan monitor, 80MB hard disk and Logimouse C7 mouse, running MS-DOS 3.2 at 10 MHz. (2) NEC Multispeed EL laptop computer running MS-DOS 3.2.
List Price: $99

Reviewed by Hardin Brothers

Good things do indeed come in small packages. The Avatex 1200p modem, although hardly larger than a deck of playing cards, is a simple, rugged device that makes a good companion for laptop and portable computers.

The Avatex modem is 4.6 inches long, 2.4 inches wide and 1 inch thick, and it weighs about 5.5 ounces. A built-in 25-pin female RS-232 connector at one end connects directly to a computer's serial port (9-pin serial ports require an adapter). At the other end are jacks for an external power supply, a modular phone plug and an Avatex acoustic coupler, which can be purchased as an option. A small on/off switch on one side of the modem, two LED lights on the top and two small thumb screws for securing the modem to the computer's RS-232 connector complete the package.

The Avatex 1200p works like other 300/1200-baud Hayes-compatible modem. It supports the AT command set now used by most communications software, and it can be set to produce modulation tones that match either the Bell 103/212A or CCITT V.21/V.22 standards. According to the Avatex specifications, the modem can operate between 0 and 50 degrees Celsius, a claim that I was not able to test but which indicates that the modem should work whenever and wherever you can use your computer.

You can power the modem with either a small AC adapter included in the package or with its internal rechargeable battery. The AC adapter recharges the battery when the modem is turned off. Avatex does not document how long the battery will last between charges, but I've used it online for over an hour with no problems. The presence of an on/off switch also helps preserve battery charge while offline.

The well-written, 56-page manual for the modem is aimed more at novices than experienced modem users. If you are familiar with modems in general, you should be able to get the Avatex modem connected and running without even opening the manual.

PC-TALK 4, a standard communications program for the IBM PC and compatible computers, is included in the 1200p package. A CompuServe starter kit also is included. However, only the first two chapters of the PC-TALK documentation are supplied, which is enough to get the program running but not enough to take advantage of all of its features. PC-TALK often is distributed as shareware; to get the full manual, you must register the copy included with the modem by sending an additional $19.95 to Headlands Communications Corp. or by printing a 120,000-byte documentation file included on the program disk.

People who prefer other communications software can use programs they already may have or wish to acquire. If the software supports Hayes-compatible modems and their AT command set, the programs should work without any problems.

I purchased the Avatex modem instead of buying a more expensive, internal modem for my laptop computer. For desktop use, you may want a larger modem with more status lights, but the Avatex 1200p's small size and light weight make it an ideal traveling modem for any portable computer.

Hardin Brothers is West Coast editor of PC Resource *magazine and a frequent contributor to* Online Today.

Go Online for More Hardware Reviews

The following hardware review is available this month in *Online Today Daily Edition* (GO OLT-220).

Acer 900 AT-Compatible Computer
Manufacturer: *Acer Technologies*

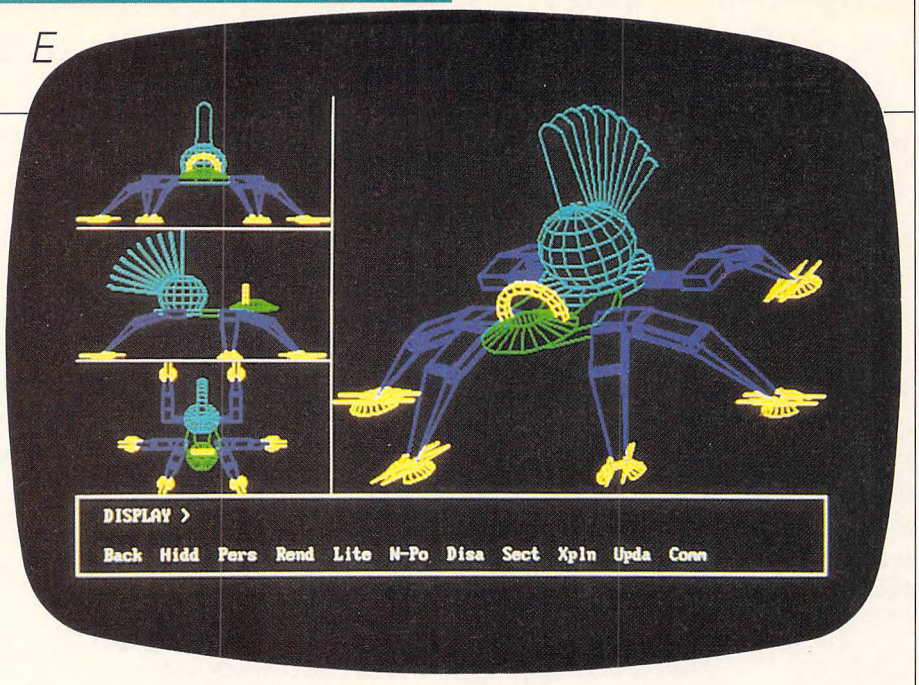
Generic 3D Solids Version 2.2

Expands Design Horizons

Generic Software
11911 North Creek Pkwy. South
Bothell, WA 98011
206/487-2233 or 800/345-9194

Computers: IBM PC, PC-XT, PC-AT, PS/2 and compatibles.
Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.
Media: Supplied on three 5.25-inch diskettes and two 3.5-inch diskettes; requires at least one diskette drive but hard disk is recommended.
Copy Protection: None.
Required Peripherals: Color or monochrome monitor with graphics-capable video adapter; supports numerous video adapters including CGA, EGA, PGC, VGA, MCGA, Hercules, AT&T 6300, Video-7 Vega, Orchid Designer and others.
Other Requirements: Minimum 512K RAM; 640K recommended.
Optional Items: Math coprocessor highly recommended; pen plotter (supported via separate PenPlot package); pointing device (supports numerous digitizers, pads and mice); dot-matrix printer (supported via separate DotPlot package).
System used for test: 1,024K Proteus 286GTX with two 1.2MB diskette drives, one 20MB hard disk, two 15MB Sysgen DuraPak drives, 10MHz 80287 math coprocessor, ATI VIP video adapter, NEC MultiSync monitor, Microsoft Mouse, Acer LP-75 laser printer and Hewlett-Packard 7475A Graphics Plotter; running PC-DOS 3.10 at 12MHz.
List Prices: $349.95; $49.95 each for DotPlot and PenPlot; $89 each for 3-D Architectural, Structural Steel, Mechanical Design and Font libraries.

Reviewed by Ernest E. Mau



Shortly after a review of Generic 3-D version 1.0 appeared in *Online Today Daily Edition* (May 1988), Generic Software released version 2.2. Now known as Generic 3D Solids, this version significantly enhances an already striking solids modeler.

This version retains surprising speed, gained by using boundary representation rather than point-line representation of entities. Drawing usually is done in a wireframe view, but the program can quickly change views, remove hidden lines, render (shade) a drawing or prepare walk-through tours that pass inside objects.

Version 1.0 was good, but version 2.2 is much better. For example, drawing primitives for dimensioned cones, spheres and domes (hemispheres) have been added to earlier tools for boxes and rods (cylinders). Pick a dome addition, specify a radius and wall thickness, and watch the dome appear. Each primitive has its own dimensions, such as a cone's radius, length and thickness. Other drawing aids handle polygons, polylines and nodes. Objects can be "swept" through space to make surfaces, especially surfaces of revolution, and polygons can be extruded to make solids. A new "surface patch" function even builds irregular surfaces.

The program still can draw holes in polygons or drill objects, so creating hollow tubes is easy. Editing and deleting commands are effective, and a "delete all but" command is particularly useful. The entire world or individual groups, objects and planes can be moved or rotated at will.

Screen displays are quick and responsive for wireframe views. Displays slow down for hidden line removal and surface rendering, but are faster than other programs I've seen. The user controls all display modes, including whether whole-screen updating takes place for each change or only on demand. A math coprocessor speeds operations considerably.

As before, the user can have one, two or four windows, and simultaneous views such as front, side, top and isometric are handy during object construction to see effects not evident from just one angle. The user still can remove backplanes, display vanishing-point perspectives using specified viewing distances and viewing widths, cut a section through a drawing, remove hidden lines and objects or render the drawing. A nifty new capability can divide an object into two objects at a construction plane, and each part can be kept or removed. A typical application might be cutting a dome in half to make a quarter of a sphere.

An expanded Graphics Manipulation Language can create and play back macros that automate repetitive tasks.

Because version 1.0 could only prepare wireframe drawings (with or without "backplanes" removed) for printing and plotting utilities, I'm particularly excited about the new ability to make drawing files with hidden lines removed. Those can be used by Generic CADD, DotPlot or PenPlot programs, permitting paper output of hidden-line drawings that wasn't possible before. The process is somewhat complicated and uses an external utility program, but it works.

Version 2.2 still lacks any ability to put rendered drawings to paper. Doing that takes some other memory-resident screen capturing program. However, 3D Solids and capturing programs such as Inset System's HiJaak don't get along well. Captures work, but space for drawings is reduced. Exiting the capture program inevitably garbles 3D Solids' menus, making it necessary to leave the program blindly and restart it.

I remain annoyed at the restrictive concept applied to point light source manipulation, which I cannot use at all. I've seen other programs achieve spec-

tacular shadowing by mixing color and black dots on 16-color video displays, but 3D Solids demands a 256-color display for light source portrayal. Yet it supports only a few such cards (Orchid Designer and IBM Professional Graphics Controller). Even the MCGA mode of VGA cards is locked out of 256-color operation and displays only black and white.

Before plunging into 3-D designing, know that working with solid objects in space isn't simple. Generic 3D Solids still takes some convoluted navigation and manipulation to watch and control a host of things, such as the drawing world as a whole, current objects, groups of objects, construction planes, layers, three-dimensional and normal cursors, viewing angles and viewing distances. The newly rewritten manual and new tutorials help somewhat, but the tutorials don't go much beyond basic skills. Advanced operations such as building walk-throughs or applying the Graphics Manipulation Language can take considerable experimentation.

Nevertheless, 3D Solids is a powerful tool for those who need its capabilities, and version 2.2 is an improvement over the pioneer release. Now that I can put hidden-line drawings onto paper via DotPlot and PenPlot accessories, I feel much more comfortable with it and find it far more useful than before.

Ernest E. Mau, a full-time, free-lance writer and Online Today *reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.*

CADAPPLE:

A Professional CAD System for the Apple II and IIgs

Versacad Corp.
2124 Main St.
Huntington Beach, CA 92648
714/960-7720

Computers: Apple IIgs, Apple IIe (128K) and Apple IIc.
Operating Systems: Apple Pascal version 1.3.
Media: Supplied on four 5.25-inch diskettes or one 3.5-inch diskette.
Copy Protection: None.
Required Peripherals: Pointing device (mouse, joystick or digitizer).
Other Requirements: 128K RAM.
Optional Items: Graphics-capable printer; plotter is recommended (various plotters are supported).
System used for test: 512K Apple IIgs with one 5.25-inch diskette drive, one 3.5-inch diskette drive and Apple ImageWriter printer on Appletalk network.
List Price: $395

Reviewed by Brian D. Monahan

CADAPPLE 3.5 is an extremely sophisticated computer-aided design system for the Apple computer family. This is a serious program; it isn't for casual users and certainly isn't priced for the home market.

Apples lack the large number function keys offered by some computers, so CADAPPLE redefines the functions of the top row of shifted keys. Thus, the parentheses and other keys have special functions in CADAPPLE.

The system is built on a series of menus that displays available program options at any point. After booting up, you are brought to the main menu, which presents a list of primitives. If you choose to add on to a drawing, you will be asked to pick an object. There is a wide variety from which to choose, including arcs, French curves, circles, ellipses, rectangles and polygons. After making a choice, press the screen function key (left parenthesis) to leave the menu screen and move to the drawing screen. On the drawing screen, click on the first position you want the object to be locked into and move the pointing device to a second point.

I was pleased with the performance of the mouse on a IIgs while running CADAPPLE. The mouse was sensitive, and I was able to get objects exactly where I wanted them. Diagonal lines and circular shapes, however, did lose some edge definition on the screen.

CADAPPLE makes it easy to erase lines, unlike some drafting and drawing packages. It also is easy to modify objects from a special Modify menu. You can exit from the program by pressing the Escape key, which is especially useful in drawing programs where it is easy to make mistakes. All drawings are saved on separate data disks created from the Pascal operating system's filer menu.

The program enables you to add text to drawings and change the sizes of that text. And you can use automatic dimensioning and plot drawings to scale. A grid pattern can be drawn on the screen to help you draw, and any part of a drawing can be "exploded" to facilitate working on it. The program allows you to operate on up to 250 levels (a level is similar to a plastic overlay that can be turned on or off).

Data can be entered in absolute, relative or polar mode. In absolute mode, if you want to start at 5.25 units over and 6 units up from the 0,0 point, you enter 5.25 for X and 6 for Y. Relative input is in relation to a reference point on the drawing, and polar input lets you enter the angle and distance to the polar point.

The way that CADAPPLE handles numbers is a good indication of its sophistication. It can store and manipulate real numbers consisting of up to seven decimal digits of precision. The program won't let you enter a number that cannot be represented correctly. However, as a result of calculations that the program might do internally, there is a possibility of producing numbers that cannot be handled, and a warning to that effect is provided.

The "group" option is one of CADAPPLE's more sophisticated capabilities. One or more objects in a drawing can be treated as a group. Once created, various operations can be performed on the group. It can be copied, moved, scaled or rotated. You also can "image" a group, meaning that the group will be flipped over to its mirror image. Finally, you may delete a group and "undelete" it if you make an error.

The program comes with a lengthy manual that is more than adequate for serious professional users. Those who are looking to "play" with the program will find the manual overpowering.

The manual's structure made it difficult to get started quickly. The opening section, which contains technical information about the machines the program will run on, could have been better covered in an appendix. Other pages are packed with information but do not tempt one to browse casually. There is no reference card, but a system management chart helps guide you through the menus. The program also comes with two templates that identify the unusual functions some keys take on. Help is available online from most of the program.

In all, CADAPPLE 3.5 is a sophisticated and relatively expensive program. It provides features found in professional drafting programs. Those who have professional or near-professional goals to accomplish with Apple computers will not be disappointed by it.

Brian D. Monahan is associate vice president of Iona College in New Rochelle, N.Y., where he also teaches computer science courses. His CompuServe User ID number is 70007,3000.

Choice Words

Electronic Dictionary and Thesaurus

Proximity Technologies
3511 N.E. 22nd Ave.
Ft. Lauderdale, FL 33308
305/566-3511 or 800/323-0023

Computers: IBM PC, PC-XT, PC-AT, PS/2 and compatibles.
Operating Systems: MS-DOS version 2.0 or higher for IBM PC or PC-XT; MS-DOS 3.0 or higher for PC-AT; MS-DOS 3.3 for PS/2.
Media: Distributed on five 5.25-inch diskettes; available on 3.5-inch diskettes; requires one diskette drive and a hard disk.
Copy Protection: None.
Required Peripherals: Hard disk with 1.5MB of available storage (or a 1.2MB diskette drive capable of reading 360K diskettes); 80-column monitor.
Other Requirements: 100K of free RAM.
Optional Items: Color monitor; supports most popular word processors.
System used for test: 512K Victor V286 computer with 1.2MB diskette drive, 20MB hard disk and EGA color monitor.
List Price: $99

Reviewed by Franklyn Jones

Choice Words is the fruit of an ambitious project that combined the lexicographic resources and cooperation of Merriam-Webster with the computer technology of Proximity. The result is a comprehensive electronic reference tool based on *Webster's Electronic Dictionary* (concise edition) and *Webster's Electronic Thesaurus*.

Unlike an ordinary spelling checker, Choice Words' dictionary provides concise definitions, hyphenation points, part-of-speech information and even occasional usage notes for about 80,000 words. The dictionary also aids in correcting misspelled words by providing a list of alternatives that not only look similar but are phonetically similar. The thesaurus contains 40,000 entry points and provides 470,000 synonym responses in all. The two reference tools are designed to work in harmony with each other.

Choice Words installs in short order on a hard disk. Before you load the program, however, run the menu-driven "setup" program to customize Choice Words to your system. For example, you can change the default word processor setting from generic to any of more than 35 word processors. In theory, Choice Words will work better when it knows which word processor to deal with.

The setup program also lets you customize the colors of the various screens and texts in the program. And you can define any "hot key" combination to toggle in and out of Choice Words from your word processor. Finally, you can modify Choice Words so both the dictionary and thesaurus programs are loaded simultaneously.

The default has only one program module fully active at a time and swaps back and forth to disk as you move between dictionary and thesaurus. If you choose to have both programs active at once, you will see improved performance, but you will need an additional 50K of free memory.

Using Choice Words is easy. To check the spelling or possible synonyms for a word, first highlight the word with the cursor, then press the appropriate "hot key" to go to either the dictionary or the thesaurus.

With the dictionary, you will see the word you highlighted in a small box. Press the Return key. A list of short definitions for that word in its various forms (noun, verb, etc.) is displayed. You might also be told how the word is used in a sentence. It is possible to probe to a second level to learn more about a particular definition. If the word you highlighted in your document is not spelled correctly, Choice Words informs you and displays alternatives.

With the thesaurus, Choice Words first displays a list of possible uses of the word, such as noun or verb. Select the most appropriate use and press the Return key. The screen then presents a list of synonyms for that particular application of the word. From there you can highlight a synonym and learn more about its meaning from the dictionary.

Choice Words is easy to set up and use, but I had difficulty with Microsoft Word 4.0, which it claims to support. When I tried to toggle from Word to Choice Words, my system beeped, the keyboard locked and the monitor turned a fuzzy yellow. The [CONTROL-1] "hot key" I used is not a Word-specific command, so it shouldn't have caused any conflict with Choice Words. Fortunately, Choice Words worked perfectly with Symantec's Q&A word processor.

Aside from that problem, my only complaint concerns Choice Words' inability to automatically check spellings throughout a document. The best you can do is look up one word at a time, which is disappointing. And because toggling between the word processor and Choice Words is not instantaneous (there are some calls to disk), the process is somewhat slow.

The Choice Words documentation comes in a 92-page spiral-bound book with a hard cover. Much of the manual describes setup options and provides tutorials on the dictionary and thesaurus. There also is a brief mention of some problems you may run into when using Choice Words with certain word processors.

Choice Words certainly is impressive in its ability to define and cross-reference entries in its dictionary and thesaurus. However, I see its usefulness limited to word processing applications in which precision of communication is critical. For most general correspondence and routine writing tasks, the dictionary or thesaurus that accompanies many word processors would be satisfactory.

Franklyn Jones was formerly the managing editor of Interface Age *magazine and editor-in-chief of* IBM PC Update *magazine. He has written articles for various computer publications, is a regular contributor to* Online Today *and serves as a marketing and communications consultant.*

Go Online for More Software Reviews

The following software reviews are available this month in *Online Today Daily Edition* by typing GO OLT-230 at any CompuServe Information Service prompt. Many daily-edition and print-edition software reviews are supplemented with GIF graphics that may be viewed in or downloaded from Library 6 of the *Online Today* Readers' Forum (GO OLTFORUM).

816/Paint Graphics
Manufacturer: *Baudville Inc.*
Computers: *Apple IIe, IIc and IIgs.*

Sensible Grammar Document Style Checker
Manufacturer: *Sensible Software Inc.*
Computers: *Apple IIc and IIe; Macintosh.*

Accountant Inc. Financial Program
Manufacturer: *Softsync Inc.*
Computers: *Commodore 128; Apple Macintosh family.*

Home Finance System III
Manufacturer: *Jay Gold Software Inc.*
Computers: *IBM compatibles; Zenith Z100.*

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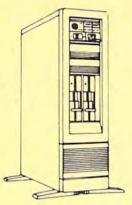

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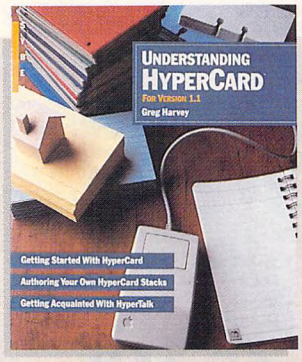
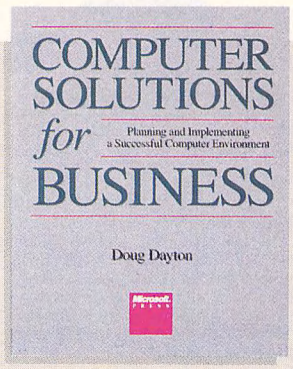
Online Book Reviews

Following are summaries of book reviews available for reading this month in *Online Today Daily Edition*. To read the complete reviews, type GO OLT-240 at any CompuServe Information Service prompt.



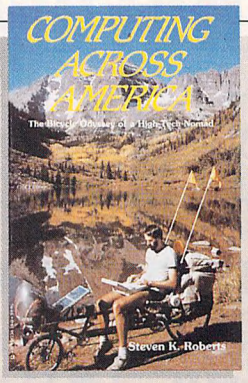
Understanding HyperCard
By Greg Harvey
Sybex, 1988
581 pages, $24.95 (softcover)

This hands-on introduction to HyperCard versions 1.0 and 1.1 is presented in a tutorial format. Reviewer Brian D. Monahan says there is an excellent mix of theoretical and practical material, making it a valuable resource for all HyperCard users. *GO 3800*



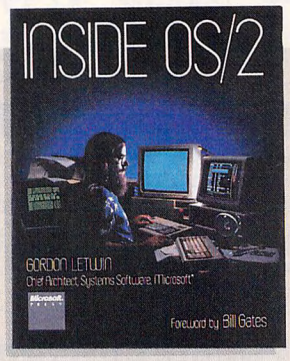
Computer Solutions for Business
By Doug Dayton
Microsoft Press, 1988
274 pages, $17.95 (softcover)

Written for the small-business owner with little or no computer experience, this book paves the way to planning and implementing a business computer system. Real-world illustrations of how computers are used in business add much to the scope of the text, says reviewer William J. Lynott. *GO 3900*



Computing Across America: The Bicycle Odyssey of a High-Tech Nomad
By Steven K. Roberts
Learned Information, 1988
347 pages, $9.95 (softcover)

This is the story of a man's high-tech journey across the country on a recumbent bicycle with a laptop computer and modem. Reviewer Cathryn Conroy says the book is witty, engrossing and humorous. *GO 3810*

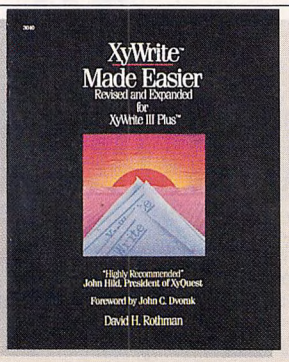


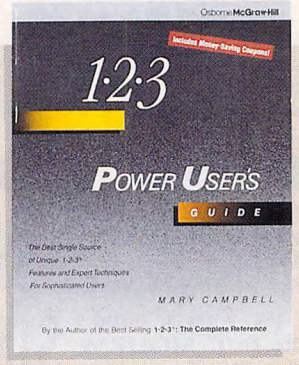
Inside OS/2: The Complete Programmer's Reference
By John L. Campbell
TAB Books, 1988
685 pages, $24.95 (softcover)

Although this book is hefty at nearly 700 pages, reviewer James Moran insists it is easy to read. The emphasis of this programmer's reference guide is on applications and the operation of OS/2. *GO 3910*

XyWrite Made Easier
By David H. Rothman
TAB Books, 1988
375 pages, $21.95

This is the kind of book XyWrite users will read with pencil in hand, says reviewer Richard A. Danca, as they underline the many tips it provides. Keyboard revisions are the book's main feature, but without a companion disk, you will need to do a lot of typing. *GO 3790*





1-2-3 Power User's Guide
By Mary Campbell
Osborne/McGraw-Hill, 1988
861 pages, $22.95 (softcover)

Reviewer Franklyn Jones says this power user's guide is aimed exclusively at 1-2-3 experts. No introductory explanations are offered; instead, it is packed with tips on using advanced features of the worksheet designed to increase productivity. *GO 3690*

Looking for a Book Reviewed in *Online Today*?

For publishing information on the books reviewed in *Online Today Daily Edition*, type GO OLT-240 at any CompuServe Information Service prompt and read this month's reviews from the main menu. Then select Option 6, "Publishers' Addresses," for information to order the books reviewed.

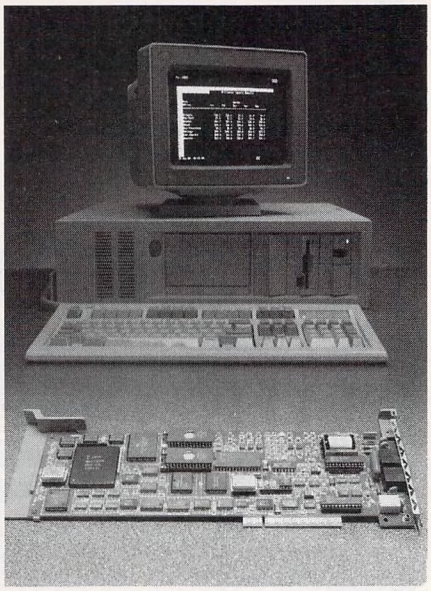
ONLINE TODAY

TrailBlazer Plus PS Modem Card for PS/2

An internal modem card for IBM PS/2 Models 50, 60, 70 and 80, operating at speeds up to eight times faster than other dial-up PS/2 modems, has been introduced by Telebit.

The TrailBlazer Plus PS fits into a Micro Channel expansion slot to support error-free asynchronous communications over ordinary telephone lines at transmission speeds up to 19,200 baud. Features include error correction, adjustment of operating speed to 2400, 1200 and 300 baud, integrated support for Kermit, XMODEM and YMODEM and more. The retail price is $1,195.

For information, contact Telebit Corp., 1345 Shorebird Way, Mountain View, CA 94043-1329; 800/TELEBIT or 415/969-3800.



PS/2 VGA Adapters

Genoa Systems has introduced two IBM PS/2 VGA-compatible graphics adapters.

The SuperVGA HiRes and the SuperVGA feature VGA/EGA hardware, BIOS and downward compatibility for MDA, CGA and Hercules. The SuperVGA HiRes costs $645 and features a resolution of 1,024 by 768 in 16 colors while the Super VGA, for $445, offers a resolution of 640 by 480 and 800 by 600 in 16 colors.

For information, contact Genoa Systems Corp., 75 E. Trimble Rd., San Jose, CA 95131; 408/432-9090.

ArchiText Text Retrieval

BrainPower has introduced ArchiText, a text retrieval, management and presentation program for the Apple Macintosh computer.

The program incorporates features not found in current hypertext applications. Text and bit-map graphics are entered and stored in ArchiText subdocuments. Text may be typed directly into an ArchiText node, pasted from the Clipboard or imported from ASCII formatted documents.

For information, contact BrainPower Inc., 24009 Ventura Blvd., Suite 250, Calabasas, CA 91302; 818/884-6911.

Tree86 DOS Enhancement

Tree86 (Version 2.0) from The Aldridge Co. is the only DOS enhancement utility with built-in EGA/VGA and mouse support.

The software features a graphics tree of the logged drive that simplifies file and subdirectory management. Version 2.0 eliminates the need to wait for reading tree and drive information on a single or many drives. It can read up to 26 drives in memory, uses expanded memory for data storage and has context-sensitive online help. The retail price is $89.95. Registered users can upgrade for $15 plus $3 shipping and handling.

For information, contact The Aldridge Co., 2500 CityWest Blvd., Suite 575, Houston, TX 77042; 713/953-1940.

Norton Commander File Manager

Peter Norton Computing has upgraded the Norton Commander, a DOS enhancement shell and file manager for the IBM PC, PC-AT and PS/2 computers.

The new upgrade is the first such program to feature built-in Lotus 1-2-3 and dBase viewers, which enable users to quickly browse 1-2-3 and Symphony spreadsheets and dBase files directly from the Commander. A new feature is an asynchronous File Find that lets users view found files in a full-screen, scrollable window as the Commander continues to search for more files. The retail price is $89.

For information, contact Peter Norton Computing, 2210 Wilshire Blvd., Suite 186, Santa Monica, CA 90403-5784; 213/453-2361.

Data Scan Image-Processing for the Mac

The first image-processing software for the Apple Macintosh computer has been introduced by BrainPower. Called Data Scan, the program recovers numeric data from printed graphics. It quantifies bar charts, area charts, log/log, log/linear, linear plots and more. An assortment of powerful interpolation and smoothing options, data filters and more offer impressive flexibility.

For information, contact BrainPower Inc., 24009 Ventura Blvd., Suite 250, Calabasas, CA 91302; 818/884-6911.

Hook-Up 9600 Modem

Computer Peripherals has introduced Hook-Up 9600, a high-speed 9600-baud modem that costs $795.

Designed for the IBM PC, PC-XT, PC-AT and compatible computers as well as the PS/2 Model 30, Hook-Up 9600 is Hayes-compatible and features bundled telecommunications software. It operates in either asynchronous or synchronous transmission modes and includes auto-dial, auto-answer, auto-redial, remote operation and auto-fallback capabilities.

For information, contact Computer Peripherals Inc., 667 Rancho Conejo Blvd., Newbury Park, CA 91320; 800/854-7600 (nationwide) or 805/499-5751 (in California).

Go Online for More Product Announcements

The following new product announcements are available this month in *Online Today Daily Edition* by typing GO OLT-250 at any CompuServe Information Service prompt.

Numbers Up, *Lotus 1-2-3 compatible pop-up spreadsheet for the IBM PC and compatible computers, Mindscape*

Fastback Plus (version 2.0), *backup utility for the IBM PC, PC-XT, PC-AT and PS/2 computers, Fifth Generation Systems Inc.*

Disk Wiz, *pop-up disk and printer manager for the IBM PC and compatible computers, Computer Creations.*

Jackie, *memory expansion board for the Macintosh II, Glanmire Electronics*

Forgetme Notes, *automatic date-oriented reminder system for the IBM PC and compatible computers, Dataline Systems Inc.*

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UPDATE

'Computer Database Plus' Available

Computer Database Plus features 11 powerful, yet easy-to-use search methods for retrieving articles from more than 120 computer-related magazines. Computer Database Plus has a $24-per-hour surcharge, a $1-per-article summary surcharge and a $1.50-per-article full-text surcharge. GO COMPLIB

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Stay on top of stocks and the day's weather forecast without leaving many online areas by using the Quotes and Weather commands.

Type QUOTES and a stock ticker symbol to check the current price of stock holdings. Separate the symbols using commas for more than one issue. The display includes the ticker symbol, the day's most recent quote and posting time, change from yesterday's close and the number of shares sold.

The Weather command (type WEA) displays a National Weather Service forecast including temperature, precipitation, cloud cover and wind conditions for the area from which you call. For a forecast in a different area, type WEA and the city and state.

Nantucket Software Support Online

Nantucket offers software support online exclusively with CompuServe. The Nantucket Reference Center provides articles and reference materials about Clipper and McMax. Nantucket's technical staff and other Clipper and McMax developers provide quick responses to questions in the Nantucket Forum (GO NANFORUM). Applications are in the forum libraries. GO NANTUCKET

Second Apple Vendor Forum Online

CompuServe has expanded its vendor support with a second Apple Vendor Forum. Participating vendors include Aba Software, Altsys Corp., Jasik Designs, Meta Software, Microseeds Publishing, OLDUVAI Corp., T/Maker, STAX! and Working Software. Vendors will be added. GO APVENB

Professional Connection 3 Updated

New version 3.1d of CompuServe Professional Connection includes an editor and other features. Directions for ordering and upgrading are online. GO VIDTEX

New Stores in The Electronic Mall®

The Law Store (GO LA) offers information on legal insurance and power of attorney. Also order common real-estate and business forms, and corporate documents. Indian River Citrus Specialties (GO IR) offers oranges, grapefruits and tropical fruit marmalades. Navel oranges are featured in December. Receive a complimentary citrus recipe booklet and a free print catalog. GO MALL

***Air Traffic Controller* Improved**

Air Traffic Controller has added an online tutorial that takes players step-by-step through a shift, explains the symbols that appear on the screen and offers hints for better play. In addition, *Air Traffic Controller* now supports color monitors. GO ATCONTROL

Reference and Education Services Reorganized

CompuServe's Education and Reference services have been reorganized to enable easier access and future growth. Select Choice 9, Home/Health/Education, and Choice 10, Reference, from the Top Menu.

Peterson's Database Updated

The 1989 edition of Peterson's College Database covers more than 3,100 accredited and approved US and Canadian colleges, and contains new sports categories, transfer admissions, detailed financial information, sports scholarships, admissions policies, campus life and programs for the learning disabled. GO PETERSON

Annual One Lap Challenge Scheduled

The Motor Sports Forum will sponsor the second annual "One Lap Challenge" Dec. 28 through Jan. 22. Compete in an electronic equivalent of a motor race that consists of a drive around each of four road courses, an oval track lap and a drag race. A schedule of events, rules, entry forms and prize information are online. GO RACING

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